THE

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# AMERICAN PRACTITIONER:

A MONTHLY JOURNAL OF

# MEDICINE AND SURGERY.

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A MONTHLY JOURNAL OF

## MEDICINE AND SURGERY.

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# THE AMERICAN PRACTITIONER.

JANUARY, 1872.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than anything else.—RUSKIN.

# Original Communications.

# ON THE AGENCY OF THE MIND IN ETIOLOGY, PROPHYLAXIS, AND THERAPEUTICS.

BY AUSTIN FLINT, M. D.,

Professor of the Principles and Practice of Medicine and of Clinical Medicine in the Bellevue
Hospital Medical College.

The reciprocal influences of mind and body offer a wide range for investigation, and certain points of inquiry relating thereto may be said to be of paramount importance as compared with other branches of scientific research. These points relate especially to the influence of body on mind. Here are questions which concern not alone mental pathology, but morality, jurisprudence, social life, the progress of civilization and human happiness perhaps, in a future life as well as in our present existence. Questions relating to the influence of the mind on the body are more exclusively medical in their character, and I shall confine myself to these in the following remarks.

With cases illustrating a morbid exaggeration of subjective symptoms, and a conviction of the existence of imaginary Vol., V.—1

diseases, all practitioners are familiar. These cases are nosologically disposed of by calling them cases of hysteria, melancholia, pathophobia, and hypochondriasis. I am tempted to introduce a brief account of two striking examples which have recently fallen under my observation.

A married lady, of education and superior intellectual endowments, nearly forty years of age, in easy circumstances, and without children, unhappily had been led to concentrate her attention on her bodily condition. After a series of fancied ailments, for which she had kept the bed for over three years, she conceived the idea that from a peculiar susceptibility of the brain she was unable to bear the stimulus of light. During several months she insisted that her room should be darkened; and the darkness was made as complete as possible by black curtains covering the windows and doors, and by surrounding her bed with screens, to absorb the few rays of light which entered when a door was opened. In the mean time repeated examinations of the eyes by an eminent oculist failed to discover any evidence of disease. After much perseverance on the part of physicians and friends, she was at length persuaded to bear a little exercise of vision. Very gradually the darkness was diminished, and she believed herself finally cured of this malady, without admitting that she had suffered from a delusion. She was undoubtedly sincere in her belief in the reality of the fancied malady, and it would have been worse than useless to have attempted to convince her to the contrary. This patient believed that to change her position in bed by her own efforts would be fraught with evil consequences, and for this purpose the constant attendance of a nurse was required; yet it is certain that there was no lack of muscular strength. Her aspect was healthy; there was no impairment of nutrition; she ate an abundance of food, and careful interrogations of the various organs showed no evidences of any definite disease.

A married lady, wealthy, and in a high social position,

about fifty years of age, consulted me for loss of the faculty of speech. She communicated respecting her malady by means of a slate and pencil, which she carried with her for that purpose. She declared her inability to speak even in a whisper. Our conversation was carried on partly in writing and partly by signs which her husband interpreted. A thorough examination of the chest was completely negative, and there was no paralysis of the tongue or lips. I refrained from expressing distrust of her inability to speak, even in a whispered voice, and after a prolonged interview I dismissed her with a prescription. Some time afterward she called again to tell me that she could not take the remedy which I had prescribed, and that her malady continued. That she honestly believed herself unable to speak I did not doubt. She is a lady of unusual intelligence, and in the second interview the conversation after a time became directed to topics in which she was much interested. Finding at length that the slate and pencil, together with her signs, which were with difficulty interpreted, failed to convey her ideas satisfactorily, she began to speak, and continued the conversation for half an hour in a natural tone of voice. I made no comment thereon, and nothing was said by her respecting the sudden recovery of speech. This was the last consultation. She has not again called upon me.

It would be easy to multiply cases illustrative of delusions respecting health. The patience and temper of physicians are sorely tried by such cases. Reasoning with the patient is without much avail. Positive assurances by the physician are often useless, or their efficacy is but transient. Ridicule only ruptures professional relations. There is ample scope for tact and perseverance in the management; and such cases claim more consideration and persistency of effort in the way of judicious treatment than they are apt to receive.

The various delusions respecting imaginary diseases, together with indefinite apprehensions concerning health, and undue attention to the functions of the body, undoubtedly enter more or less largely into etiology. There is perhaps little ground for the opinion which has been held that devotion to the study of particular affections predisposes to their development; but it is certain that constant watching of particular functions is almost sure to lead to disorder. If the attention be habitually concentrated on the digestive organs, indigestion is an almost inevitable consequence. That unfortunate being, a confirmed dyspeptic, may often indulge his appetite to the fullest extent with impunity, provided the mind be agreeably diverted for some hours afterward. The concentration of the mind on the digestive processes is, in fact, often the chief cause of chronic dyspeptic ailments. Functional disorder of the heart is frequently kept up by a conviction of the existence of organic disease, and of liability to sudden death. Frequent micturition and polyuria are produced by apprehensions relating to the urine; and temporary impotency is a well-known effect of imagined sexual incompetency. The depressing influence upon the system of fixed delusions and prolonged indefinite apprehensions is by no means inconsiderable. If diseases be not thereby induced, their production is favored by the agency of the mind, which acts either as an auxiliary cause, or by rendering the system more susceptible to various morbific influences.

The morbid mental conditions to which I have referred, as standing in a causative relation to physical maladies, are themselves often dependent on causes relating to the mind. What causes originating in the mind induce these morbid mental conditions? Observation shows that the exercise simply of the intellectual faculties rarely gives rise to mental and thereby to physical disorder. They who are devoted to pursuits involving the active employment of the intellect are not in consequence prone to diseases of the mind. Madness is rarely, if ever, an effect of "much learning," as implied in

the exclamation of Festus to Saint Paul. The maladies, mental and physical, which are incident to intellectual pursuits, as a rule, do not depend directly on the latter, but they arise from sedentary habits, or other associated violations of hygienic laws. Observation will, I believe, bear me out in these assertions. "Wear and tear," nervous asthenia, morbid apprehensions concerning health, melancholia, hypochondriasis, and insanity, together with the ills of the body resulting from these mental conditions, are the results of the emotional rather than the intellectual activity of the mind.

Among those whose work may be distinguished as *braincraft*, they who suffer from the mental causes of disease are not the close students, the industrious authors, and the laborious lawyers, clergymen, and physicians, in so large a proportion as men of business, speculators, and politicians. It is not the amount of intellectual work so much as the constant tension from anxiety and suspense, the alternations of undue exultation and despondency occasioned by the so-called caprices of fortune, and persistent over-excitement, which constitute morbific agencies of mental origin.

I will venture another statement, which, as I believe, observation will verify—namely, the calamities of life which, by way of distinction, we may call providential, are far less likely to prove morbific than emotional disturbances incident to a disordered imagination, irregularities of life, and unrestricted passions. By the term providential calamities I mean those which are in a great measure beyond human control, and therefore appear to occur more especially in the order of Providence; such as the death of relatives and friends, the loss of property by events which could not be foreseen nor provided against, and deformities or maiming by disease or injuries. Both mind and body tolerate such calamities much better than those for which the responsibility rests with man rather than with God.

Physicians, sanitarians, and moralists have of late had

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much to say respecting the evils of over-exertion of the intellect and of mental strain; and there has been much occasion for speaking of these sources of injury to mind and body in our country, especially during the past few years. But there is another aspect of the etiology of morbid mental conditions concerning which much less has been said—namely, deficient exercise of the intellectual powers, or insufficient activity of the mind, as a source of morbific agencies. Observation will, I think, show that evils of both body and mind originate quite as often in a want of the proper action of the intellectual and moral faculties as in their over-use or excitation. Occupations which employ the intellect are likely to prevent inordinate attention to the bodily functions, and herein their influence is prophylactic. Abundant illustrations of the evils of deficient activity of the mind are to be found among those who, under the delusive expectation of enjoying leisure and rest, have relinquished pursuits which involved an habitual exercise of the mental faculties. Let me cite two examples from among those which have come under my observation.

A highly intelligent, energetic, and able merchant acquired a handsome competency at about the age of thirty-five. He then began to be apprehensive concerning his health. Fancying successively the existence of different diseases, he spent most of his time in watching for symptoms and in the study of medical works. At one time the kidneys were the organs under surveillance, and he became an expert in the chemical and microscopical examinations of the urine, in order to investigate daily this excretion in his own case. For several years he exemplified the varied phases of pathophobia. At length pecuniary reverses came to his relief, and it became necessary for him to engage anew in business. He did so, and from that time, for a period now of five or six years, he has been exempt from the delusions which had previously rendered life a burden to him.

An astute lawyer, aged about forty, commencing his professional life without means, has been eminently successful as regards the acquisition of wealth. Some disorder of the digestive system led him to become apprehensive on the score of health. This resulted in confirmed pathophobia. He now devotes most of his time to the study of his bodily functions and to reading medical works. He requires elaborate analyses of the urine and fæces, and is anxious to become a microscopist, in order that he may himself examine his blood. Positive assurances that there is no evidence of disease of any of the organs of the body are unavailing. When told that it is bad policy for him to undertake to investigate his organism, he admits it, but declares that the desire to do so is irresistible. Here is one among many instances in which the absence of wealth as regards the mens sana in corpore sano would be a positive blessing. It is probable that the employment of the mind to gain a livelihood and a competence would have prevented him from falling into his present truly pitiable mental condition.

It is a well-known fact that habits of mental activity can not be given up without risk of impairing the healthy condition of mind and body. Of the members of the professions and men of business who retire to enjoy the fruits of their labors, a large proportion suffer from ennui and depression of spirits. Many become affected with confirmed melancholia and hypochondriasis, and in not a few cases insanity is the result. These morbid mental conditions, acting upon the organism through the nervous system, lower the vital powers, interfere with the processes preparatory to nutrition, and occasion various functional disturbances. Hence they promote the action of the various causes of disease, they impair the ability to resist disease, and they consequently tend to shorten life. But habits of apparent mental activity, if the different faculties be not adequately engaged, will not protect

against morbid conditions of the mind. Let me preface some remarks relating to this statement by a case.

A patient, who has hardly reached the middle period of life, by his industry, integrity, and remarkable financial ability has already acquired a large fortune. To this end his energies have been directed, and he has been eminently successful. Now, it may be assumed that any great object of human effort, when accomplished, fails to afford the satisfaction which had been anticipated. The love of riches with this patient is not a ruling passion; yet, from the force of habit, he continues to give his attention to business, and doubtless is constantly adding to his wealth. He pursues a prudent course in his business transactions, and he has become so familiar with his method of money-making that it now requires no great amount of mental effort. His aspirations for success are in a great measure satisfied; but while in the eyes of others he holds a very enviable position as regards worldly prosperity, and while, in addition to wealth, he has everything as regards social and domestic relations to render him happy, he declares, in professional confidence, that he is one of the most wretched of men. He finds himself unable to derive enjoyment from the blessings which Providence has showered upon him. He is a martyr to melancholia and hypochondriasis. His morbid mental state is not dependent on any disease of body. The difficulty is, his mental powers and capacities are not fully and appropriately occupied. The case is a type of a class of unfortunates who are much to be pitied.

The practical truth which such cases teach is that the proper exercise of all the faculties of the mind, the sentiments as well as those belonging to the intellect, is the great requisite for mental health, and consequently for happiness. The habitual activity of those attributes of mind which enter into true philanthropy and practical benevolence would often prove a sure means of preventing and curing morbid mental

conditions which embitter life. It is safe to assert, without knowledge of the fact, that George Peabody was not a victim of melancholia or hypochondriasis; but it is by no means necessary to possess the means for munificent generosity to secure the exercise of sentiments underlying the beneficent actions which render the name of Peabody illustrious. They who are not affluent, and even the poorest, may enjoy the sanitary influence (to speak of nothing else) of the exercise of these sentiments. It is one of the traditional sayings of the eccentric Abernethy, that being consulted by a rich patient suffering from mental inactivity, and the evils of luxurious indulgence of the appetite, he advised him to live on a shilling a day, and to earn the shilling. The advice embraces an important practical truth-namely, the need in such cases, in addition to temperance, of mental occupation. with an adequate purpose. Of course such advice is superfluous as regards the probability of its being literally followed; but the practical truth which it embraces is not broad enough to meet all cases. It points to the importance of the intellectual faculties only, ignoring those of the moral nature. Some one has said, in substance, that to do something each day which will render others happy is a preventive against ennui and misanthropy. If some of our patients would adopt this as a rule of conduct it would do far more toward restoring mental and physical health than any drugs which we can prescribe. I have sometimes ventured to propose this rule as a therapeutic measure, but I confess that as yet I have not in any instance secured a fair trial of it.

I trust that the tenor of the foregoing remarks will not expose me to the charge of having wandered without the proper boundaries of practical medicine. Mental disorders not amounting to insanity, it seems to me, are not sufficiently considered by medical writers, and their importance is apt to be under-estimated by practitioners of medicine. These disorders not infrequently precede and lead to insanity; and

there are grounds for the belief that timely attention to the former on the part of the physician would often prevent the latter.

It so happened, a few years ago, that I was consulted by the friends of a prominent citizen, holding an office of much responsibility, respecting a state of great mental depression, which it was feared denoted danger of insanity. From the statements which were made to me I expressed a decided opinion that this danger was imminent, and that medical advice should be obtained without any delay. This was in the evening, and it was decided to defer any action until the following day. Early the next morning the patient committed suicide. I can not but think that had he been seen on the evening before his death by an intelligent and judicious physician his valuable life would have been spared. It is true of mental as of many other diseases, that they are easier prevented than cured. In diminishing the prevalence of insanity more is to be expected from prophylaxis than from therapeutics.

The treatment of cases of insanity is very properly confided, for the most part, to those who give exclusive or special attention to this branch of medical practice; but it is to be considered that they who treat cases of insanity do not, as a rule, see patients until after they have become insane. The treatment of mental maladies which precede and lead to insanity must devolve upon the general practitioner. Hence the importance of according to affections of the mind a larger share in medical literature than has hitherto been done. It is worthy of note that some of our medical colleges have lately assigned to this class of affections a distinct place in the curriculum of instruction. It should also occupy a fair proportion of space in systematic treatises on the principles and practice of medicine; and a work devoted to morbid mental conditions originating from causes pertaining to mind and body, without embracing insanity, would prove, if full justice were done to the subject, most interesting and useful.

In conclusion, I shall offer a few thoughts on the prophylactic and therapeutic agency of the mind with reference to diseases affecting the physical organism.

Are diseases ever prevented by the mental state? It is a common belief with physicians and others that there is a measure of prevention against certain diseases in the absence of fear of them; and, per contra, that fear of a disease sometimes enters largely into its causation. It is not easy to demonstrate the correctness of this belief, but there is reason to consider it as well founded. During the prevalence of epidemics it is a matter of observation that the timid and pusillanimous are apt to be attacked, whereas they who are courageous and more thoughtful of others than apprehensive for themselves are likely to be unharmed. There is nothing in this very mysterious or unintelligible. The depressing influence of fear lessens the power of the organism to resist the action of morbific agents. On the other hand, the vital functions go on regularly and actively when the mind is undisturbed, and the attention diverted from self; hence it is more difficult for the causes of disease to take root in the system.

I think it may be assumed that the exercise of pure and lofty sentiments is conducive to the health and vigor of body as well as mind. In so far then as bodily health and vigor afford protection against disease, the exercise of these sentiments is prophylactic. If I mistake not, the facts of history show that they who, actuated by motives springing from generosity and nobleness of soul, engaged in undertakings requiring long-continued exertions, physical or mental, or both, with perhaps severe hardships and self-denials, are apt to be spared from disease and death until the objects are accomplished. Striking instances of this kind appear to exemplify a direct interposition of Providence. The ends of

Providence, however, are effected by means; and it is reasonable to suppose that in these instances there is an agency pertaining to the mind which is conservative as regards the prevention of disease. George Peabody is reported to have said, a few days before his death, "I have prayed daily to God to spare my life to carry out the work I was endeavoring in my feeble way to accomplish, and he has done it." Is it inconsistent with a belief in the efficacy of prayer to conjecture that the mental condition indicated by this statement may have been positively instrumental in prolonging the life of this illustrious philanthropist? If there be truth in the idea that the activity of the higher sentiments involves a prophylactic agency, health and length of days are to be added to other and worthier inducements for the cultivation of these sentiments.

That mental conditions are more or less operative either in promoting, or otherwise, recovery from diseases is a truth which all medical observers must admit. While on the one hand a feeling of discouragement and hopelessness as regards recovery are obstacles not infrequently in the way of cure, on the other hand hope and confidence in the means employed for recovery are often powerful auxiliaries in the successful treatment of diseases. The state of the mind of a patient enters in many cases more or less largely into the prognosis. Of course to develop and maintain this, hope and confidence should enter, within proper limits, into the aims of the physi-The difference among practitioners as regards success in the treatment of diseases arises in no small degree from a difference, first, in an appreciation of the importance of exciting a proper measure of influence on the minds of patients in the way of encouragement; and second, in the knowledge and tact required to exert such an influence. All of us know physicians who are good diagnosticians, and whose judgment in the employment of remedies is excellent, but who are comparatively unsuccessful, both in treating diseases and obtaining practice, chiefly in consequence of a lack of this knowledge and tact. The mental temperament of the practitioner has much to do in this matter. Some physicians are prone to look always on the dark side of cases. They are constantly thinking of the unfavorable events which may happen, and they are unable to conceal their apprehensions from patients. They look upon every case in its most serious aspect, and their countenances at the bedside, if not their words, express gloomy forebodings. No amount of skill in diagnosis and the use of drugs will compensate fully for the baneful effect of this temperament. It were better had those who are thus constituted chosen some other vocation than the practice of medicine. Other physicians are distinguished for always taking the most hopeful view of cases. They look ever on the bright side. Their looks infuse hope, and their words are full of encouragement. The effect is often more powerful than medication. There is, of course, an injudicious extreme in the latter direction, and between this extreme and the opposite there is a golden mean; but if there must be a deviation from this mean, it is desirable that it should incline to hopefulness rather than despondency.

We meet sometimes with cases in which recovery from disease seems fairly attributable, in a great measure, to a resolute determination on the part of the patient to recover. An unfavorable prognosis is communicated to a patient. He declares that he will not die, and he gets well, when, according to prognostics, which are not thereby invalidated, he ought to have died. Examples of this kind have doubtless fallen under the observation of my readers. It has fallen to my lot to observe a large number of cases of tuberculous disease of the lungs; and I have been struck with the fact that in the comparatively few which have ended in recovery, the patients have generally been persons of a strong will, who, appreciating fully the disease, have resolved, if possible, to overcome it. I can not but think that the proportion of

cases ending in recovery would be larger than it is were it not that the disease carries with it so often either a delusive expectation of recovery without exertion, or a passive acquiescence in a fatal termination.

The management in many cases of disease embraces measures not to effect a cure, but to secure as fully, and for as long a period as possible, tolerance of the disease. To prolong life, and to render as comfortable as may be life as long as it lasts, are the grand object of management when diseases exist which are incurable, and which, sooner or later, will end fatally. Now, mental conditions have much to do toward the accomplishment of these objects. Occupations which engage the mind sufficiently to prevent undue attention to symptoms, over-anxiety, and apprehensions are often of great utility. Knowledge of the existence of an incurable disease is sometimes extremely unfortunate for the welfare of the patient. I am convinced that the duration of life is sometimes shortened, and comfort during life lessened, by this knowledge.

It is perhaps a common belief that the existence of organic diseases of the heart should be known as early as possible, in order to take advantage of precautions relating to physical exercise and mental excitement, which are generally deemed of great importance. But even these diseases, as it seems to me, are as a rule better tolerated when, from either ignorance of their existence or an imperfect appreciation of their gravity, patients continue to pursue avocations which may involve considerable muscular exertion as well as mental activity. The explanation is simple: Tolerance of these as well as other incurable affections is promoted by keeping the general health and vigor at the highest practicable point. Ample alimentation, active digestion, and good nutrition are means essential for this end. Employment of the faculties of mind and body in the pursuits to which one is accustomed conduce to the end by promoting these means. Certain it is that not infrequently persons with incurable diseases, when they become fully awake to the fact, and make a radical change in their habits of life, begin to show a want of the tolerance which had previously existed, and the resistance diminishes rapidly from that moment. If this be a correct statement, it embodies a truth of great importance in its practical bearing, and it seems to me one which physicians do not always sufficiently consider. It is remarkable how much work has been done, and how much hardship has been endured, by men engaged in large undertakings, with either heart, lungs, kidneys, or other important organs greatly damaged by incurable disease! This valuable lesson is to be learned from these examples: that diseases which can not be cured are best and longest endured when all hygienic influences relating to mind as well as body combine to develop and maintain to the utmost extent the vigor of the organism.

NEW YORK.

#### A CASE OF ELECTROTHERAPY.

BY J. W. HOLLAND, M. D.,

Professor of Chemistry in the University of Louisville.

Mr. Robinson, aged forty-one, a medical student, was fifteen years ago, when convalescent from remittent fever, stricken with partial deafness in both ears, the loss of sense in the right ear being more pronounced than that in the left. During the period which has elapsed since there has been but little amelioration of his hearing. Close examination showed no impairment of healthy structure in the parts accessible to inspection, nor did the history incline one to the opinion that organic mischief had been either the cause or an incident in

the course of his affection. It was plainly a case of "nervous deafness," probably due to a sudden but enduring apathy of the auditory nerve.

The feeblest current from a volta faradaic coil that was perceptible to the hand was employed upon both ears successively. The auditory canal was filled with water, and the positive electrode, in the shape of a metallic conductor, insulated-save at the end, where it terminated in a silver ball about the size of a barleycorn-was inserted nearly to the tympanum. The circuit was completed by the negative sponge electrode being placed upon the superior cervical ganglion of the same or opposite side. A sitting of five minutes' length resulted in the immediate and considerable improvement of both ears. On reaching the street, the hearing was so much more acute than when the patient entered the office as to impel him to remark that "it was the revelation of a new world." Where before the tick of an uncommonly noisy watch could not be heard even when pressed hard upon the ear and mastoid process, the renewed sensibility enabled him to hear it nearly an inch away. The revival of the auditory nerves gained fresh force from each electrical sitting; and one may fairly presume that, as five applications have accomplished so much, by continued excitation the torpor may eventually be entirely removed.

LOUISVILLE, KY.

### HOSPITAL GANGRENE.\*

BY CARL PROEGLER, M. D.

The first changes which precede the outbreak of hospital gangrene often escape the surgeon's notice, and especially was this the case with my patients. My observations have detected the following formations:

- 1. The wound, which showed healthy red granulations, was covered at the beginning with a grayish, shining substance, and in the latter period with a yellow substance, which could not be removed from the granulations without bleeding. After its removal, larger or smaller ulcerations, with sharp, pointed borders, could be seen. Generally these ulcerations would extend as far as the cicatrized borders, and even they were destroyed by the ulcerative process.
- 2. The disease was ushered in by effusion of blood into the swelled and clouded granulations. This effusion did not last very long. Soon the granulations of the part formed a yellow mass, or small abscesses were formed among the granulations. In both cases the effects were the same. On some parts of the broken-down granulations there would be seen something very much resembling a soft chance.
- 3. The disease commenced with deep-seated necrosis of the tissue, so that in twenty-four hours there would be a large ulcer, taking in all the surface. Its appearance depended on the nature of the adjacent parts. If the granulations themselves were soft and juicy (sit venia verbo), and lay upon soft parts, as on muscles and on loose tissue, they presented an appearance for the most part shiny, gray or yellow, and pulpous. But when the granulations were on harder tissue—firm fascia, tendons, or periosteum—they were then glossy, but not as much so as in the other formations.

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<sup>\*</sup> With special reference to a pamphlet by Prof. Koenig, Rostock.

At times apoplectic patches of hemorrhagic formation, more or less extensive, could be seen in the jelly-like tissues, where there was more arterial bleeding, but never appeared on so large a scale as Pirogoff describes.

It is evident from the foregoing that the connective tissue has much to do with the formation of gangrene. By removing the deeper layers of the wound, we see that it has still more to do with the extension of gangrene. The connective tissue paves the way for the gangrene, which may extend itself longitudinally; and in the deeper tissues it is always the first attacked. This is especially true of the softer connective tissues.

For the most part, gangrene invades the soft, subcutaneous tissue, and follows it, loose muscles being preferred; but where the tissues are joined by sparse and firmly-connecting tissues, gangrene makes but slow progress, and holds good in almost all cases, so that one may know, according to the anatomical position of the parts affected, which region will be first destroyed, just as deep abscesses may be traced from a knowledge of their anatomical relations. The direction is very much influenced by the subcutaneous tissue nearest the wound, and according to its structure the extension of gangrene is slow or rapid.

If the skin is adherent to the deeper layer by short, firm connective tissue, or if gangrene should commence in a broad scar, usually we may prognosticate a less rapid extension than when the skin is adherent to a flabby tissue. Here progress is often so rapid that the wound will enlarge to double its size in a short time. For the enlargement of the wound the destruction of the skin is necessary; but this is always secondary. It commences when the subcutaneous tissue is already infected beyond the border of the wound and gangrenously destroyed. On the same scale, gangrene progresses deeply by intermuscular tissue. Here the muscular sheaths are the means which convey the disease into the lower parts,

where it will extend as on the surface. The richer the tissue the more muscles there are in the surroundings, and the less firmly the single muscle fascia is joined with connective tissue the more the gangrene will spread. This may explain the rapid progress of gangrene in the muscles of the thigh, or rather between them, on the calf of the leg, and in other regions. In these muscles particularly we see the preference for connective tissue, and after this is destroyed the disease attacks the muscle, which will afterward become disintegrated by necrosis.

It seems also that gangrene makes its way in the vessels by the perivascular connective tissue, and in this way hemorrhage may, I think, be explained. I have had no opportunity of making an investigation, but it seems reasonable to suppose that the soft connective tissue surrounding the vessels is the means of furthering gangrene. The vessel is imbedded, as it were, in a tube of gangrenous tissue, and subsequently becomes itself gangrenous. With the commencement of gangrenous destruction of any part bleeding begins, and is obstinate probably for two reasons: I. The clot in the gangrenous vessel is not a lasting one, because it hastens destruction; 2. The vessel can not retract into the tissue, being encircled by unhealthy, gangrenous tissue. The same character shows itself also when gangrene affects the bones. The periosteum is always more extensively affected, and is destroyed in great shreds. I frequently saw it on the anterior surface of the tibia, and in such a manner that skin and subcutaneous tissue remained intact, while the extension of the disease on the periosteum was very considerable. By the destruction of the periosteum and the tissue of Haver's canals necrosis is first induced, a fact which can be easily seen in new-formed bone-i. e., with soft callus.

I do not say that tissues only will be invaded by gangrene. The remaining tissue finally perishes, as I have already said, and the skin will be more or less affected by gangrene. But

the manner in which the skin perishes is very materially modified by the quality of the elements of which the underlayers are formed. If they are soft and net-like tissues, the disease will take hold very quickly, and, being undermined and thinned, the skin peels off. This undermined skin, which, as we shall see, is distinguished by redness and pain, perishes sometimes so extensively and so quickly that it becomes blue, gray, or black, and in very marked cases whole circles peel off. The decay of the skin is then followed by a little affection of the subcutaneous tissue. If the skin is connected by firmer underlying tissue, the integrity being almost a unit, gangrene does not spread so rapidly. A very marked contrast exists in the perishing of cicatrized skin. Here, on account of the short-fibered tissue which connects the cicatrix with the underlying parts, rapid extension of the disease is not possible. The whole cicatrized part, with the underlying tense tissue, is attacked simultaneously, and on that account destruction is isochronal. No undermining, and therefore no far-spreading, gangrene takes place; hence a more molecular necrosis here ensues, and the progress of the disease resembles an ulcer on the border of the skin more than gangrene in the common sense. It is the manner in which the disease progresses that enables us to distinguish between gangrene and molecular necrosis. The progress of the disease makes the latter what it is, without being able to assign an especial local name; and it follows that it is not always possible to fix the diagnosis in the beginning, but it may require several days of observation.

There are a series of changes in the wound—croupous coating, diphtheritic covering, hemorrhage, and circumscribed necrosis of granulations of the scar, up to gangrene of the entire cicatrix—without it being possible to diagnose specific gangrene. These coatings are sometimes latent, as the croupous covering of the wound, so that it is not possible to make a diagnosis of hospital gangrene. As we have already

pointed out, there are several light forms of gangrene; and it may be correct to assume that they are produced by the causes arising from hospital gangrene, especially when they occur in a room in which there is gangrene, or in which there is a patient who has or has had hospital gangrene. But the croupous covering is only significant when, after the coating is gone, the underlying tissues appear ulcerated and infiltrated, especially if the cicatrized border breaks down in the periphery and becomes ulcerated. The correct diagnosis of this formation and the distinction here drawn have no specific significance for the patient, since they affect neither the healing process nor his general feelings. But it is of great importance to the neighboring wounded if we admit the possibility of a direct contagion, and we must consider the disease according to analogy. I need mention here only tonsillar diphtheria as an example; for, granting that the product of diphtheria need not be the disease itself from which contagion spreads, still an innocent wound in one patient might become deep, pernicious, and gangrenous, because of the presence of gangrene in the ward.

We know that so-called croupous or diphtheritic coatings, in an anatomical sense, especially in the first variety, may arise, without our being able to find any cause for them. We know, further, that chemical and physical agencies may cause the same; as, for instance, a somewhat stronger solution of permanganate of potassium may color some granulations singularly white, and their appearance might be taken for superficial diphtheritic deposits.

Of mechanical means we mention only the examination of wounds with a probe or finger, or extraction of spicula of bone, which may give rise to coatings of granulations, and sometimes deep-seated necrosis. I once heard a celebrated surgeon announce that the finger was the best probe, and subsequently saw him probing almost every patient for pieces of bone, etc., invariably inducing either gangrene or erysipelas.

Such practice is certainly an objectionable one, for the reason that we may detect in the majority of cases pieces of bone, etc., with the common probe. The gentleman in question, who was afterward recalled, will be remembered by my American friends who served with me in Germany as having acquired the enviable name of "bone-hunter."

There may be further causes in the interior of the wound or its secretions, which may give rise to local inflammation in the granulations and surrounding tissue, and generally terminating in "necrosis of the tissue." I found on granulating surfaces, with deep-seated ulceration and purulent matter, that the granulations broke down in circumscribed rows, the remains of which showed an ulcerative deepening in the surface, which spontaneously healed. Sometimes this is repeated on several places of the ulcerations, but especially on those which are exposed to overflow from purulent matter. Occasionally these cases are ushered in by apoplexies of the granulations; and I have often observed spontaneous healing occur when the secretion of pus ceased. It sometimes appears with foreign bodies, which are imbedded in the soft parts, and cause secretion. Pieces of bone, projectiles, and especially pieces of cloth, are the exciting cause. I have seen a deep-seated gangrene on the calf of the leg arrested by the removal of the foreign body. Diagnosis is exceedingly difficult here. With ædema of the granulations, ulceration takes place, and the borders and deep-seated soft parts may become gangrenous; but after free incision, which gives vent to the pus and foreign body, the wound quickly cleans itself.

I have not been able to observe whether syphilis causes similar changes in the wound, but I have treated a number of syphilitics in which healing was quite normal. When several wounds occurred in a patient, very often those most remote from the gangrenous ulcer remained unaffected.

About the duration and progress of gangrene I am not able to communicate anything based on facts; but I had

occasion to observe that the wounds after healing often preserved a tendency to local croupous or diphtheritic granulations, to hemorrhages, necrosis, and ulcerations, and sometimes even severe relapses occurred.

Hospital gangrene is generally ushered in by fever, but it is difficult to say whether it precedes or follows it. In some cases I observed violent shaking, as in ague; but the local symptoms could be noticed, as coating of the wound, hemorrhage, deep-seated destruction, and redness at the periphery of the wound, with much sesitiveness; temperature as high as 39–41° Cel. In deep-seated ulceration fever was generally more intense than in milder cases. The more hidden the gangrene, and especially where it occurred between and underneath the bones, the longer the fever would last.

I have very rarely seen pyæmia in even ugly and deepseated wounds. As the gangrene I witnessed was mostly in French soldiers, who seem to be very susceptible to the disease, it is quite noticeable that so little pyæmia occurred. Does gangrene confer in a certain degree an immunity from pyæmia? Neither saw I much erysipelas.

After being discharged from the German service, at the close of the war, I went to France, where I had an opportunity of trying the treatment as laid down by Professor Koenig, in the very able and interesting article to which reference has already been made. An extensive use of carbolic acid and permanganate of potash soon convinced me that they were comparatively inefficient, at least in all the deeper-seated varieties of gangrene. In the more superficial forms of the affection, as ulceration of the granulations and diphtheritic coating, these remedies may be useful; but as for any specific action on the part of either, I was never able to detect it. A remedy for hospital gangrene can only be a deep-going and an infection-destroying caustic. Without stopping here to discuss the merits of the several caustics in use, let us inquire if it be possible to reach gangrene when it is seated under-

neath the skin, between the interstices of the muscles, with any other remedy.

We use a remedy which fills the pouches and folds of the cavity; we even apply the actual cautery; expose the hidden parts by the knife; make incisions in the skin in many directions; split fascias and muscles, so as to bring the remedy in contact with the diseased parts. But how little does all this accomplish; and the knife has at last to be resorted to.

That we are not able in extensive gangrene to expose the folds and pouches without the knife is clear; and my experience in our own war, and a somewhat extensive private surgical practice, proves the correctness of this view. The French surgeons rely too much on the cautery; and the patient, on account of intense fever, goes from bad to worse. I unhesitatingly say that the scissors and knife play an important part in the treatment of gangrene, for with them we can reach and expose the deepest parts; and it is gangrene in those parts which generally produces septic fever and loss of life. I myself, like Prof. Koenig, hesitated in the beginning to cut very extensively; but by and by I became bolder, and divided not only large parts of but even entire muscles. It is a good deal better that the knife should cut muscles, and the caustic destroy the affected part, than that gangrene should make havoc in both the muscle and surrounding healthy tissue.

For superficial gangrene cutting is certainly not necessary. Here Cooper's scissors and the caustic are sufficient. If the parts are exposed, we should select a suitable caustic; and I agree with Prof. Koenig in considering the actual cautery objectionable for several reasons. First, it takes a long while to get it ready; then it is somewhat uncertain in its action, and an iron of different size and shape is required for the several folds and pouches.

Fluid acids and caustic potass. are not of convenient use, and their effect is not very visible in deep-seated parts. A

caustic should be, first, constant in its action; second, it should have the power to reach the deeper structures, and control the healing process of the same; third, convenience of application; fourth, it should be competent to reach all the folds and pouches of the part. According to Koenig, chloride of zinc combines all these requisites. It should be but little diluted, rather oily. Bits of cotton should be dipped in this solution, and afterward pressed out. A sufficient number of these pieces are placed either flat on the surface of the wound, or partially pressed, in variously-formed pellets, into the folds of the tissues. The advantage of this method consists in this, that the surgeon himself may prepare the solution and press these small tampons into the wound. Zinc acts only as a caustic where tissue without epithelium is present. The tampon accommodates itself to the parts, while we can measure the depth and time that it should remain. The longer it remains the more will the caustic reach the deeper parts. Before applying the caustic, chloroform to blunt the sensibility should be used. It is sufficient for most cases to let the tampon remain eight or ten minutes; very seldom are fifteen or twenty minutes necessary. The crust formed is whitish, and it is always five or six days before it separates. But we may see much sooner whether or not gangrene has stopped spreading. The signs are that the inflammatory redness on the periphery of the wound begins to fade, and the general appearance of the patient improves, the fever subsiding In the mean time the wound may be moistened either with lime-water or carbolic-acid compresses. We have in this way healed very many deep wounds, when they could be reached, with a single use of the caustic, so that the high fever subsided in two days. If untouched parts should remain, the caustic ought to be used again; but it is very seldom that we observe them after thoroughly removing the crust. The ugliest wounds for healing are compound fractures from gun-shot wounds, in which there is an infected

cavity between the fragments, or in wounds which, on account of their being covered by bones, can not be exposed as wounds under the scapula. Here one use of the caustic will seldom be sufficient.

Koenig points out the treatment of the bleeding which occurs in the cases already described. After gangrenous destruction of the femoralis, after ligating the vessel, hemorrhage ensued, and as *ultimum refugium* the *iliaca externa* was tied, and bleeding controlled; but the result was gangrene of the foot, and for that reason the tampon was substituted afterward in hemorrhage in gangrenous tissue. In two individuals very much bleeding occurred; in one probably from the ulnar artery in fracture of the ulna, in the other from a wound on the outside of the femoralis, below Poupart's ligament. In the latter, by dividing the sartorius and the greater part of the rectus and tensor fasciæ, between which the gangrene extended, the bleeding was at once arrested by the zinc tampon. In the former the zinc tampon alone was sufficient.

If the following mechanism of the process of bleeding be accepted, it is self-evident why and how the arrest of hemorrhage occurs by using the caustic. We suppose that the sheath of a vessel, with the perivascular tissue, is first attacked by gangrene, but not destroyed entirely down to the border of the gangrene; and that the infected vascular tube thus encircled with gangrenous tissue can neither form a thrombus nor the vessel itself retract. Both disadvantages must, under favorable circumstances, be bettered; for by using the caustic both the vessel and perivascular tissue will be deeply destroyed, the formation of clots effected in the now healthy tissue, and retraction of the vessel will then be able to accomplish the closure.

AURORA, ILL

### Reviews.

Skin Diseases: their Description, Pathology, Diagnosis, and Treatment. By Tilbury Fox, M. D., M. R. C. P., Fellow of the University College, Physician to the Skin Department of University College Hospital. First American from last London edition. Edited by M. H. Henry, M. D., Surgeon to New York Dispensary, Department of Venereal and Skin Diseases, Fellow of the New York Academy of Medicine. New York: William Wood & Co. 1871.

The names of the author and editor of this work are an ample guaranty of its excellence. Dr. Henry stands in the front rank of dermatologists in this country, as Dr. Fox does in Europe. We agree with Dr. Henry that no work on dermatology in our language - in truth, we may say, in any language-combines so completely the results of a thorough knowledge of the pathology of skin diseases, such sound clinical observation, and so rational a system in the application of therapeutics. It is a small book, condensed and clear, and contains all that is known of practical value on the subject. It is written in a peculiarly attractive style, and is equally adapted to the practitioner and the medical student. Except the description of rhinoscleroma added by the editor, and a rearrangement of the formulary, it is a reprint of the London edition. The paper, type, and binding do credit to the pub-The profession in America had already cause to thank and honor Dr. Henry for his capital journal of skin diseases, and he now greatly increases our obligations to him by placing easily within our reach the most practical, most useful, and best book on diseases of the skin extant.

In the first chapter the importance of the study of skin diseases is enforced by many arguments. Skin diseases are excessively common; they are specially calculated to educate the faculty of minute observation. They afford ample opportunity for gaining the confidence of patients, being ailments which are seen as well as felt. Again, their inveteracy and disfiguring character often affect in a peculiar manner the personal comfort and vanity of men and women, so that relief is estimated at a comparatively high value, while the good or bad effects of treatment in the majority of cases can be readily appreciated by the patient. Many cutaneous maladies being contagious, it is highly important to have positive and thorough knowledge on this point. An error in diagnosis may allow the dissemination of ringworm or other eruption in a family or school, and thus bring discredit to the practitioner and discomfort to the patients. Accurate observation of morbid changes in the skin may throw much light on the pathology of internal organs. The successful study of skin diseases necessitates a knowledge of diseases in general, and the only successful practitioner in cutaneous ailments is he who is master of the details of general therapeutics.

There is a certain unity of character about diseased actions in various parts of the body which justifies us in instituting a comparison between the morbid processes in different organs. A recognition of the changes in one will not infrequently throw light upon the nature of those occurring in another organ about which some doubt exists. One of the most important relationships which should be considered is that of the skin and kidney functions. The skin is often made to relieve kidney disease, and the converse may frequently be effected. Considerable difference exists in the same disease in different climates. Lichen ruber, scrofulosis, and lupus are more severe on the Continent than in Great Britain. In Syria and Egypt syphilis is much milder than in other parts

of the world. Well-fed, meat-eating nations suffer much less than others with most of the ulcerative affections.

Dr. Fox does homage to Willan, and declares himself a Willanite. The principle of Willan's system is perfectly right, the details alone being defective. Willan's labors, gauged by the medical circumstances of the time in which he lived, take the highest clinical rank. They gave an impulse to the study of skin diseases in England, and secured that country an enviable standing in regard to dermatology, which it is hoped she may continue to hold.

Chapter second is devoted to general pathology and elementary lesions. A large number of cutaneous diseases are inflammatory in their nature. The line of demarkation between ordinary nutrition and inflammation is often difficult of demonstration. Inflammation in many cases arises out of an exaggerated action of those processes that are in operation in healthy nutrition. Inflammation does not consist of a special something introduced from without, but is simply an alteration, in one sense, of the relative activity of conditions that make up healthy nutrition; and it would seem to be excited by disorder of the blood, of the nerves, and even of the tissues themselves. It is to be hoped that these facts, so clearly enunciated by Dr. Fox, may soon be universally accepted by the profession. In this chapter the pathology of maculæ, erythema, papula, vesicles, blebs, pustules, squamæ, and tubercula is carefully elaborated.

In the third chapter the causes of blood, tissue, and urine change; influence of age, sex, flannel, scratching, etc.; conditions which determine the local development of disease; and the comparative frequency of the different skin diseases, are set forth. We are too apt to attribute diseases to blood changes, and to overlook the tissues themselves and the nervous system as the seat of origin of disease. Wilson's doctrine, that skin diseases are of both local and general origin, is adhered to. In England eczema is the most frequent skin

disease. Rosacea comes next, and next comes psoriasis. In America our observation is that acne is most frequent, and that eczema comes next.

Under the head of general diagnosis the modifications of disease produced by diathesis, chronicity, remedies, scratching, abortive development, and the co-existence of two or more affections are pointed out. Important points in diagnosis are the mode of onset, the temperament, the duration of the disease, the recurrence of the disease, the occupation of the attacked, the age of the patient, and the seat of the disease.

Referring to prognosis, Dr. Fox correctly says that skin diseases are rarely fatal. Pemphigus neonatorum, ecthyma cachecticum, rupia, and pemphigus foliaceus are most likely to be followed by fatal results. The older the patient is before hereditary predisposition shows itself the more likely is he to get well. The presence of a scrofulous or syphilitic habit, pernicious hygiene of all kinds, frequent recurrence, co-existent disorder of mucous surfaces, local degenerations of tissue, marked chronicity, symmetrical arrangement of the eruption, intemperate habits, dyspepsia, uterine disorders, dentition, old age, or infancy, all conduce to protract the cure or render it difficult. Lepra, psoriasis, ichthyosis, erysipelas, eczema, urticaria, and lichen are most likely to recur. All parasitic diseases are curable.

Dr. Fox's therapeutics must commend itself to the modern and practical physician. To our mind it is almost unexceptionable. He says the principles of treatment applicable to diseases in general must be adopted in reference to diseases of the skin. The basis of most cutaneous eruptions is inflammation. That must be treated upon ordinary principles. We must not forget that in the early states of eruptive disease local irritation plays a very prominent part. One of our chief aims should be to check or prevent this, adopting as much as possible a soothing plan of treatment.

This does not appear, he says, to be the generally-received opinion; nay, the empiricism of modern times has an exactly opposite tendency, and it is decidedly true that many treat skin diseases by attempting to overwhelm by medicinal action the natural progress of the disease. In a therapeutical point of view, skin diseases divide themselves into two classes-those which are purely local and those which are general. Among the local, practically speaking, are parasitical, papillary, nævoid, hypertrophies of normal structures, such as molluscum, keloid, horns, certain pigmentary changes, chillblains, burns, scalds, etc. Among the general are blood diseases of acute and specific character, which require mere conduction through their normal stages. Others are due to various degrees of debility, demanding general tonic or alterative action, or the employment of specific remedies. In all cases special attention must be directed to the influence of diathesis. gouty, the scrofulous, the rheumatic, the sanguineous, the syphilitic, etc., all call for their appropriate remedies irrespective of the kind of local eruptions; or, to put the case in another way, the general treatment in the same disease varies according to the general aspect of the patient. All deviations from the standard of health must be rectified before or in conjunction with the employment of special medicines. In a large number of cases disorders of the general health, which appear to have little connection with the mischief, are the exciting or determining causes.

In reference to local treatment in the general diseases, the theory is to soothe the part at the outset, in the secretory stage; to use alkaline washes and slight astringents. In the quiescent or early chronic stage, mild stimulants, absorbents, and finally revulsives; taking care in all cases to remove crusts, scales, and the like by poulticing, warm foments, or greasy applications. In the very young the health of the nurse requires attention, and it is often advisable to make the milk of the nurse the medium of medicinal action. The

use of irritants is to be specially avoided in the young, whose skins are delicate. In all wet diseases (the secretory) the local remedies should be used in a liquid form; in the dry, in the form of ointment. The formation of thick crusts does not seem to be favorable to the use of ointments.

The free action of the kidneys must be carefully enforced. It is one of the most important points of treatment. Antiphlogistic remedies are blood-letting, emollients - e. g., the tepid bath, mucilaginous and acidulated drinks, but especially the acetates of ammonia and potash. Where we wish to preserve the eruption from being injured for fear of ulceration, as in zona, pemphigus, and rupia, we employ mucilaginous fluids-e. g., oatmeal gruel; or even absorbent powders-e. g. lycopodium. Local maceration, by glycerine especially, is useful in hard, dry, cracked states-e. g., psoriasis palmaris. Irritation, if general, is allayed by tepid sponging, gelatinous and alkaline baths. Baths are useful for purposes of cleanliness, also as antiphlogistics, as soothing agencies, and as a means of employing various medicines. The antiscrofulous remedies are cod-liver oil, iodides of iron and potassium internally, and iodide ointments, iodine baths, and the like externally; the antiherpetics, as they are called, are typified by sulphur; the nervine tonics are quinine, alkalies, aconite, strychnine, and alkaline baths; the antisyphilitics are bichloride of mercury and iodide of potassium internally, and mercurial ointments externally; the gouty remedies are colchicum and alkalies, etc.; the sanguineous, antimonials, etc.; the antisquamous are arsenic internally, and tar externally.

And here Dr. Fox gives the treatment of skin diseases in a nutshell. True, we are utterly opposed to antimony and blood-letting, both of which are suggested by Dr. Fox; nor have we any faith in iodide of potassium in scrofula; nor do we believe, we must say, in a sanguineous or a dartrous or a herpetic diathesis; but still in this Dr. Fox may be right and we wrong.

Dr. Fox states that pellagra, or Italian leprosy, existed, in 1830, in twenty thousand out of a million and a half of the Italian population. Pellagra is due to insufficient and improper food, and other bad hygienic conditions, but appears especially to come from diseased Indian corn (ergoted maize), which is the chief food of the poorer Italians. Genuine leprosy, elephantiasis græcorum, appears to be due to bad and deficient diet and malarial influences. Though incurable, Dr. Fox has seen benefit in its treatment from aperients followed by quinine. It is non-contagious. Once a common disease in Britain, it has now almost disappeared under drainage, increased and improved food, and the generally ameliorated physical condition of the masses. The subjects of two cases shown us by Dr. Fox in London, and of three seen on the Continent, were the sons of persons who had lived in tropical climates, or who had themselves acquired the disease in India. One was a citizen of New Orleans, who had gone to France to be treated.

The so-called "army itch," spoken of by Dr. Fox, we are confident, from extended observation of the affection in the Confederate army, is no distinct disease. It is prurigo, developed in improperly fed and clothed and uncleanly persons by various sources of irritation, such as scabies, pediculi, etc.; sometimes impetiginous, sometimes eczematous, and sometimes ecthymatous.

Dr. Fox agrees with Hebra that plica polonica is not a disease at all, but merely a matting of the hair from filth, neglect, etc. He regards quinine, perchloride of iron, and turpentine as the best remedies for purpura. We have found aromatic sulphuric acid most efficacious. In acne his first step is to restore the general health, and then by thorough ablution and rubbing, together with astringent or stimulating applications, the disease is cured. In hair diseases he pursues a similar course, and has much faith in cantharides and nux vomica externally. We can testify to the efficacy of the practice in both classes.

A clear and judicious summary and an extensive and excellent formulary greatly add to the value of the book. Like Erasmus Wilson, Dr. Fox has incorporated with his index a glossary, containing the derivation and meaning of terms employed in the work.

This most admirable book would be still more valuable than it is if it contained colored plates of all the dermatoses described. All medical works should be picture-books. Object-teaching surpasses all other modes of conveying instruction. To the reader who has never seen the disease the most minute and lucid verbal description must often fail to convey the desired idea. But, despite this imperfection, Dr. Tilbury Fox's is still the best book on dermatology that has appeared in any language; and it affords us sincere pleasure to be able to speak thus of the work of a friend who is as charming as a man as he is excellent as an author.

## Clinic of the Month.

[The "Clinic" for this month is made up mainly of abstracts from the fourth volume of *Trousseau's Lectures on Clinical Medicine*, which has been translated by Dr. Cormack and recently published by the New Sydenham Society. While the extracts contain perhaps not much that is altogether new, they relate exclusively to treatment, and serve to illustrate, as far as they go, the practice of the lamented physician who was esteemed the foremost practitioner among the Paris faculty.

Dyspersia. — When dyspersia is associated with wellmarked chronic gastritis its treatment is subordinate to the treatment of that affection, and consequently consists in the use of remedies for inflammation of the stomach. as in every other form of dyspepsia, regimen constitutes the most important part of the treatment. The first requisite is to reduce the quantity of food taken, so as to render it proportionate to the aptitude of the stomach. This does not imply the necessity of putting the patient on low diet. The selection of the particular kind of food which ought to be prescribed is found by the majority of physicians to be a great difficulty. We doctors have all a strange manner of advising our patients on the subject of diet. If we ourselves are fond of tea or coffee, we are indulgent to those who use them habitually or even immoderately. If we prefer this or that kind of wine; if we have a fancy for strong meat-beef, mutton, or game; or the flesh of young animals-veal or chicken; or if we fancy fish, we are apt to allow them to our patients.

In fact, it is not unusual for all the clients of a physician to be placed by the physician on the same diet as he himself adopts.

The law by which we ought to be guided in regulating the regimen of a patient is to recommend the food which the patient has found to agree best with him. person tell you that milk acts on him like a purgative, you will avoid ordering him to take milk, although it is perfectly well digested by most persons; avoid ordering an article of food which might induce vomiting, diarrhea, and absolute indigestion. Nevertheless, how many physicians, without considering individual peculiarities, invariably order milk diet in chronic affections of the stomach! Therefore ascertain exactly the dietetic aptitudes of your patients, find out even their fancies, which vary with the person's state of health, and still more perhaps with the state of his disease. A man who has been suffering for some time from dyspepsia has a wonderfully correct knowledge of the aliments which will best agree with him. Find out what they are, and recommend him to use them, though they should seem preposterously unsuitable, and personally you should have an antipathy to them.

There are certain ordinary rules, however, which ought not to be neglected. As a general proposition, light soups (made with or without animal food), poultry, fish, and non-farinaceous vegetables are suitable in chronic inflammation of the stomach; provided always these articles have not been found improper by the individual's own experience. In reference to drink, after making due allowance for individual idiosyncrasies, the general rule is to allow only a very small quantity of fluid to be taken, and to recommend fermented drinks, wine, or sometimes beer, diluted with water.

Regularity in the hours of meals is a point of no inconsiderable importance. It not unfrequently happens that dyspepsia arises solely from imperfect mastication, caused by loss of teeth or by the patient swallowing his food unchewed. In such cases to indicate the cause of the malady is also to indicate the means of cure.

When dyspepsia is dependent upon a chronic inflammation, which has retained to a certain extent its acute character, topical modifying agents, substitutive remedies, are indicated. Among them emetics hold the first place. Their part does not consist in freeing the stomach from the saburral matter or bile which load it. To seek merely to evacuate these secretions would be as useless as to sweep away the morbid secretions which cover the skin affected by eczema. Although in a case of poisoning the action of emetics is mechanical, their operation is totally different in dyspepsia. Here they act as substitutive agencies, as modifying powers.

Tartar-emetic, for example, when brought into contact with a mucous membrane, acts in the same way as upon the skin-that is, by determining violent inflammation; but this inflammation, subordinate to the quantity of the agent by which it is excited, undergoes spontaneous cure, is therefore transient, and that is the characteristic of every inflammation excited to produce a therapeutic result. We substitute for the preëxisting gastric inflammation another kind of inflammation, transient in its character, and which will cease spontaneously. We act in the same manner as when we employ irritant collyria in inflammation of the ocular mucous membrane, or caustic injections in blenorrhagia. Exactly in the same way emetics act beneficially in the treatment of dyspepsia. It is also by modifying the gastric inflammation, and not by causing evacuation by stool of the saburral matter, the bile, and the morbid secretions of the stomach, that calomel, gray powder, blue pill, and other mercurials prove useful in numerous cases. Both emetics and purgatives, however, must be cautiously administered; for we can not induce frequent vomiting in a dyspeptic without running the risk of going beyond the limits proposed.

Dr. Lasègue has obtained beneficial results in such cases by

the employment of injections containing subnitrate of bismuth and chalk. Their utility is not less in the dyspepsia of chronic gastritis. They ought to be given in large doses. The chalk, mixed with an equal quantity of subnitrate of bismuth, ought to be taken, as a general rule, before meals, in doses of thirty to sixty grains each.

The secretions of the stomach resume their normal character on the cessation of the inflammation of the gastric mucous membrane. It is necessary, however, in some cases to give special aid to the secretory functions, which are in greater or less disorder. Certain acids—such, for example, as lactic and acetic, or, better still, hydrochloric acid-are excellent remedies in the dyspepsia of chronic gastritis. At the same time—and the fact is remarkable—while some persons are benefited by acids, others derive no good from them. such it is necessary to administer alkalies. It is difficult to determine which class of remedies will prove most suitable, and it is also difficult to state the manner in which acids and alkalies act. We only know that in chronic affections of the stomach the patient, after having been subjected to the treatment of which we have just been speaking, retains difficulty of digestion, sometimes alkaline mineral waters, and sometimes, though not so frequently, acid mineral waters, are administered with success.

Bulimic dyspepsia, which is that form of the affection accompanied by a feeling of emptiness of the stomach soon after eating, is characterized by diarrhea supervening almost immediately after meals; and patients thus affected will tell you that they digest very rapidly, that their food is not heavy on the stomach, that their stomach is in excellent order, and that the disorder is only in the intestines.

The means at our disposal for the treatment of these cases are, first, opium. This medicine, although sometimes deplorably misapplied in the treatment of diseases of the digestive organs, is in the class of cases now before us more

useful than any other remedy. To derive from it, however, all the benefit it is capable of imparting, it requires to be given with the greatest circumspection. It is impossible for me to tell you the exact doses in which it ought to be administered. In each particular case the physician must decide this question by considering the tolerance of the individual for opium. There exists great diversity in this respect, not merely in the differences of tolerance in individuals, but also in the difference between the degree of tolerance which the same person has at different times, according to the varying circumstances in which he may happen to be placed. Some persons can bear enormous quantities of opium; others are affected by a single drop of laudanum. This statement is applicable to adults, but young children are sometimes narcotized by even one fourth of that quantity. Nothing is so difficult as to judiciously manage opium. No remedy is dispensed so improperly, so prodigally, and with so little inquiry into the idiosyncrasy of the patient. This observation has a general bearing, and applies not alone to dyspepsia.

In bulimic dyspepsia, with constant diarrhea, opium is a wonderful remedy, provided it be administered in moderate The laudanum of Sydenham is the most convenient preparation to employ, for its doses are the most easily apportioned. It is prescribed at first in doses of a single drop, the dose being augmented if necessary, before and not after eating. To obtain success this precaution is indispensably necessary. The small quantity of opium received into the stomach before digestion has commenced is sufficient to keep duly quiet and regular its muscular excitability, the inordinate extent of which causes the symptoms you have to combat. This too it accomplishes without suspending organic sensibility. Opium, on the contrary, administered in large doses, producing effects beyond those intended, causing slumber both of the muscular excitability and organic sensibility, arresting at once the muscular movements and the secretion of the gastric juice, increases in

place of calming the disturbed state of the digestive function, to the performance of which regular muscular movements and secretion of gastric juice are indispensable.

Belladonna is undoubtedly useful in this form of dyspepsia. though its beneficial action is less decidedly beneficial than that of opium. You are aware that belladonna, in common with all the poisonous solaneæ, produces relaxation of the bowels, while opium causes constipation. So decidedly is this property characteristic of belladonna that the physician avoids administering it to patients affected with diarrhea. But while there is a reason for not prescribing it in cases of diarrhea in which the cause of the flux exists in the intestine itself, it would be wrong not to employ it in the cases to which I am now directing your attention. I have no hesitation in stating in the most positive manner that cases of this class occur in which belladonna renders services very nearly equal to those derived from opium itself. Here a word of explanation is necessary. Experience tells us that the poisonous solaneæ are very often our most powerful means of conquering constipation. You all know the effects of tobacco. To some individuals a cigar is the best laxative. There are others upon whom tobacco produces no laxative action, but upon whom this is produced by a pill containing a grain or half a grain of the extract of henbane. These substances perhaps owe this singular property to the poisonous principle which is the active base of all the solaneæ. Belladonna, the utility of which in some cases of constipation is so well known, acts in virtue of this principle. Here the same remark applies which I made in respect of opium: it can only be administered in very small doses. A centigramme (the seventh part of an English grain) is generally sufficient; though one is sometimes obliged to give a somewhat larger dose-say, for example, a centigramme and a quarter, or two centigrammes and a half; but there is rarely any necessity for exceeding these quantities.

It is important in prescribing belladonna, or any other remedy derived from the *solaneæ*, not to exceed certain limits, otherwise a sort of paralysis might be induced, which would have to be treated by aromatic or alcoholic stimulants, or, better still, by the preparations of nux vomica. It is consequently necessary, as I have just said, to begin with small doses, increasing them if necessary. In the same category as the *solaneæ*, certain antispasmodic remedies, such as valerian, asafetida, and oxide of zinc, are indicated. All of these remedies ought to be given in very small doses, and always at the beginning of meals.

Acid dyspepsia, often associated with flatulent dyspepsia, is a more common affection than the bulimic. The physician frequently makes serious mistakes in the acid form of the disease, in which sour eructations and copious secretions of gas occur during digestion. We physicians have the misfortune to be very bad chemists. Nevertheless, with an amount of assurance proportionate to our ignorance, we do not hesitate to apply to therapeutics the little knowledge of chemical theories which we possess. Laboratory experiments having taught us that acids neutralize alkalies, we lay hold of the fact. Taking it as a starting-point, the treatment of certain cases of dyspepsia seems simplicity itself. The stomach contains a large quantity of acid which, say we, must be neutralized. We can do this by administering magnesia, bicarbonate of soda, lime-water, or chalk. Notwithstanding our reasoning, the evil increases, the acid becoming more abundant in place of diminishing. We nevertheless cling to our original opinion. In the increased severity of the symptoms we only see an additional reason for insisting more strenuously than ever upon our treatment. We double or triple the doses of the alkali when we obtain no beneficial results from the doses first prescribed. Soon afterward, very probably, the patient is seized with diarrhea. In place of benefit from our treatment, matters have become worse. Being thus baffled, we impute to the

obstinacy of the disease consequences entirely due to our untoward interference.

In such cases a certain amount of physiological knowledge will prevent our falling into the errors toward which our chemical theorizing tends. Physiology teaches that the gastric juice is naturally acid; that acidity is its constant condition, both in man and the lower animals, irrespective of species, sex, age, or food; that it is due to the presence of phosphoric, hydrochloric, and lactic acids, but particularly the latter, which alone is found in a free state. These acids are secreted in greatest abundance during digestion, and their secretion is indispensably requisite to the due performance of the functions of the stomach. When digestion is not going on the gastric secretion is less abundant and feebly acid, or sometimes it is neutral or even alkaline. The normal secretion of gastric juice is sometimes partially suspended, but there are other cases in which it is secreted in too great quantity. Irritation of the mucous membrane of the stomach, provided it neither proceed to the extent of inflammation nor too far, causes increased secretion. Excessive irritation or inflammation arrests the secretion.

In cases of this description you can not counteract the acidity by any alkalies acting as chemical agents. The experiments of Claude Bernard upon animals prove that the secretion of gastric juice, and consequently the acid fluids of the stomach, increase when alkalies are administered, while the secretion is delayed or diminished by giving acids. These positive facts entirely set aside the trivialities of chemical theory, which are of no use as guides in the treatment of disease, and can still less lay down therapeutic laws to us. When chemists tell us that alkalies are useful in a considerable number of cases of acid dyspepsia, they only repeat what we had previously learned from clinical experience. But when they state that the benefit is produced by the alkalies neutralizing the acids, we reply that no neutraliza-

tion has taken place, or if there has it has been only to a very limited extent. On the other hand, we maintain that these remedies act as powerful modifiers, which not only place their stamp upon the organ, but also impart a peculiar modality to the whole economy, in virtue of which the functions are regulated, and the abnormal acidity of the secretions is corrected.

Flatulent dyspepsia. Dyspepsia in hysterical women, in hypochondriacal men, in all very nervous persons, in great eaters, and in old people, is chiefly flatulent; that is to say, characterized by the formation of a large quantity of gas, and accompanied sometimes by acid eructations supervening immediately after meals. In this form of dyspepsia alkaline preparations are also of some use, if given only for a few consecutive days, and immediately followed by the administration of bitters. Thus for five or six days the patient ought to take at the beginning of his two principal meals, and on going to bed at night, a powder composed of magnesia, chalk, bicarbonate of soda, four to six grains each, mixed immediately before taken in a fourth of a tumbler of water. This to be followed by the employment of bitters, among which quassia ought to occupy the chief place. In the morning fasting and at midday, at an equal interval between the two principal meals, the patient ought to drink a cup of the infusion of this wood, prepared by leaving a tea-cupful of cold water for fifteen or twenty minutes in a goblet made of quassia; or, which is still better, by macerating two grammes of quassia shavings in cold water for from four to six hours. I have seen this form of dyspepsia yield much more rapidly to this simple treatment than to the long-continued use of alkalies. In these cases wine of cinchona is also indicated. It ought to be given either immediately after meals, or immediately after the patient has taken a small quantity of food, in order to prevent the pain in the stomach, which is apt to be excited when taken fasting.

In flatulent dyspepsia also decided advantage is obtained

by the use of certain *liqueurs* administered after meals. Those which I prefer are *anisette fine de Hollande*, and the yellow liqueur of the Grande-Chartreuse, which is simply an alcoholic tincture of various aromatic plants. I need hardly add that these liqueurs must be taken in very small quantities. Other aromatic preparations may be substituted for them. For example, we may give the infusion of illicium anisatum, or star anise, one of the ingredients of the *anisette de Hollande*, or we may give an infusion of a mixture of star anise, common anise, ginger, and cascarilla bark. These substances, when reduced to coarse powder, are weighed out in packets containing fifty centigrammes of each ingredient. Their infusion is taken immediately after meals.

Hydrotherapy is a method of treatment in this kind of dyspepsia which is not less efficacious than those I have now reviewed. Its use in other forms of dyspepsia is not great. Let it be understood that the hydrotherapic treatment which I now speak of is hydrotherapy methodically applied, and carried out in a regular manner.

Sea-bathing I place in the same category as hydrotherapy. The patient ought to remain a very short time in the water, if he bathes on our northern ocean-coasts. On the sea-shores of the southwest of France—in the Mediterranean—the duration of the bath may be longer, as the climate is warmer. In these regions, in addition to bathing in the sea, the patients may use baths of sand naturally heated by the sun. Patients ought to remain in these baths of sand for from fifteen minutes to an hour; in fact, till a decided reaction has been established in the skin.

Unfortunately sea-bathing, traveling to mineral springs, and hydrotherapy in a hydrotherapic establishment are means which are not accessible to all. In such cases the hydrotherapy may be pursued according to the following plan, which, though less efficacious than the methodical system of a hydrotherapic establishment under medical direction, is

nevertheless really beneficial. Home-hydrotherapy consists in enveloping one's self on getting out of bed in the morning in a wet sheet slightly wrung out of cold water. After remaining for one or two minutes wrapped up in the wet sheet, you rub yourself or get yourself rubbed with it. You are then rubbed with linen which is quite dry, but not warmed. After this you dress, and as soon as possible start on a walk, which you continue for three quarters of an hour. The hydrotherapic operation may be repeated at night before going to bed. Great advantage may also be derived from immersions, not exceeding three minutes' duration, in cold salt-water. Hydrotherapy pursued after this fashion will suffice in many cases so to modify the action of the whole economy as to cure the gastric disturbance, and restore to the stomach its lost tonicity.

The sympathetic dyspepsia which often accompanies uterine affections, such as displacement of the womb, associated with chronic catarrhal inflammation, is often cured simultaneously with the cure of the uterine affection. In these cases local treatment, cauterizations of the neck, for example, which will modify the catarrh when dependent upon ulceration, properly applied bandages, hypogastric bands, more rarely the use of pessaries—local treatment in fact—will prove very useful, not only for the uterine lesion, but also for the gastric symptoms which depend upon it. These means, however, are not in general sufficient in themselves. It is necessary to have recourse to general treatment, in which an important place must be assigned to sea-bathing and hydrotherapy.

In cases of dyspepsia associated with sluggishness of the large intestine and obstinate constipation, belladonna is marvelously efficacious. Begin by prescribing it in very small doses; a centigramme each of the extract and of powdered leaves may be administered morning or evening. If the constipation does not yield after one or two days, the dose of belladonna may be gradually increased, to one, three, four,

or five centigrammes, according to circumstances; but five centigrammes in one day must never be exceeded. Thus administered, belladonna is perhaps the most active remedy with which I am acquainted in this kind of dyspepsia. It is generally sufficient to produce regular stools, and at the same time to reëstablish the digestive functions so thoroughly that individuals who had fallen into a state of deplorable debility and emaciation rapidly regain strength and plumpness. The remedy, however, acts in these cases only in an indirect manner—that is to say, by restoring to the large intestine its lost activity; but this activity is communicated synergetically to the other parts of the digestive tube, and thus it is that the stomach regains its original energy.

When the belladonna proves insufficient, its operation may be assisted by giving every evening a tea-spoonful of castor-oil simultaneously with the belladonna. The castor-oil may be administered in a capsule of gelatine. When the bowels are regularly open these means may be discontinued. This treatment, I repeat, is sovereign in the cases now under consideration; but it is in an especial manner sovereign as a means of restoring regularity to the disordered functions. To secure a continuance of these beneficial effects the cooperation of the patient is required. Patients affected with obstinate constipation, dependent upon sluggishness of the intestine, ought to go regularly to the closet every day at the same hour. At first their efforts may be unavailing, but they must nevertheless persevere; and if they do so the results will ultimately prove satisfactory.

Should these means, should the belladonna treatment, prove inadequate, injections are permissible. But, if used, it is essential that the injections should consist of cold water, and be administered in very small quantity. Injections of tepid water ought to be expressly prohibited, for their use ultimately leads to an increase of that atony of the intestine which we are endeavoring to combat.

Let us suppose that the constipation has resisted the use of these means; it is then necessary to have recourse to purgatives, particularly to aloetic preparations, such as dinner pills, grains de santé, and similar remedies. Immediately before eating, from one to four of these or such like pills may be taken. Rhubarb, in a dose of from fifty centigrammes to a gramme, may be advantageously substituted for the pills, without causing diarrhea, and with the effect of producing one stool regularly in the twenty-four hours.

THE THERAPEUTICS OF THE PRESENT DAY.—Dr. Henry Kennedy, of Dublin, has contributed to the Practitioner some interesting observations on this subject, which he concludes with the following propositions: I. That the proper position the physician holds in reference to the administration of drugs is that he treats and, with the assistance of nature, cures disease by their means. 2. That in our endeavors to improve therapeutics too much must not be expected, inasmuch as there is a limit beyond which we can not pass, and this limit is and must remain far short of certainty. 3. That if we ignore the labors of our predecessors we will commit a grave mistake; for they have left after them a mass of therapeutic facts which it would not be possible even at the present day to excel, and therefore our labors should begin where theirs ended. 4. That the physiological dose of each drug is the proper one to use, as it is only then its therapeutic virtues can be ascertained. 5. That at present the doses of many drugs are much smaller than our predecessors used, and therefore the results in our hands can not but be unsatisfactory. 6. That our predecessors, wherever it was possible, used medicines in the form of powder, which had the great advantage of being free from any risk likely to be caused by any other mode of preparation. 7. That experiments thus made must lead to more definite results than any made with other preparations of the same drugs. 8. That compound medicines, like the tincture of perchloride of iron, should be recognized as such, and not as simple drugs. 9. That the use of diluents is a very important principle to recognize in treating disease. 10. That a knowledge of human physiology is essential to give anything of a scientific status to our therapeutics.

PODOPHYLLIN.—In an article on the uses of this remedy, in the Practitioner, Dr. Charles Phillips says: "The vomiting and diarrhea which occur in gastro-enteric inflammation are often arrested, and with rapidity, by the exhibition of a few doses of the one sixth to the one twelfth of a grain every four or six hours. In the remittent fevers of children, where there is much heat of skin, headache with delirium, a quick and full pulse; dry, brown, and furred tongue; nausea, or vomiting of bilious matter; pain or uneasiness in the stomach; sleeplessness, with a general sense of weariness and a grinding of the teeth during sleep; podophyllin, taken in doses of one tenth of a grain every four hours, will often cut short those various symptoms in a very remarkable manner. The effect is much improved by the exhibition of occasional doses of aconite. When the stools of young children and infants have been white or clay-colored, podophyllin has frequently brought the bile into their motions by administrations in doses of one tenth to one twentieth of a grain every six hours, persevering in the use of it for a short period. In these cases it also regulates the bowels. Prolapsus of the rectum in children may also sometimes be removed by administration of similar doses of podophyllin every night and morning. In dyspepsia and in hepatic derangements, characterized by loss of appetite, acid regurgitation, putrid taste in the mouth, flatulence, and a tendency to constipation or to diarrhea, one tenth of a grain of podophyllin, exhibited night and morning, will frequently induce the best results."

### Motes and Queries.

CHRONIC CYSTITIS TREATED BY ESTABLISHING A VESICO-VAGINAL FISTULA.—Dr. Parvin contributes the following to that excellent journal, The Clinic, for November 4, 1871:

"Mrs. — has suffered from cystitis for three years, in which time she has gone the usual round of treatment, both constitutional and local, without experiencing the least benefit. In addition to the vesical trouble she has uterine retroversion. This I have greatly relieved by Cutter's pessary; and thus too there was for a time a slight improvement in the condition of the bladder; but it was only slight. Two weeks ago, the patient being under the influence of chloroform, and lying upon the left side, knees and chin approximated, the perineum drawn back with a Sim's speculum, a curved trocar was passed along the urethra, and caused to penetrate the vesico-vaginal wall just beyond the vesical meatus; and through the opening thus made the blunt blade of a pair of scissors was passed into the bladder, and an incision nearly an inch in length, directly in the median line, was made. When the hemorrhage, which was not great, ceased, a tube, somewhat larger in diameter than a female catheter, half an inch in length, and provided at either extremity with a perforated 'button,' was inserted into the opening. The buttons, of course, were to secure it in position, one being within the bladder, the other in the vagina. The former was concave on the face looking toward the vesical cavity.

"The bladder is syringed out at least once daily with a large quantity of warm water through the tube, using an ordinary Davidson's syringe, but having adapted it to a curved tube eight inches in length, slightly bulbous at its extremity, which has five perforations; this tube readily entering the vesico-vaginal tube, and permitting the escape around it from the bladder of the injected water." Thus far the condition of the patient has been decidedly improved, and there is every reason to hope that in the course of six or eight months, by the rest given the bladder and the faithful use of warm-water injections, the cystitis will be cured, and then the fistula can be readily closed.

"Remarks. The operation here detailed has been performed by our distinguished countryman, Dr. Emmet, and by the late Sir James Simpson. With each doubtless it was original, but to which one priority should be accorded is

<sup>\* &</sup>quot;This washing out the bladder may be done while the patient sits on a bed-pan; but a better way is to have her lie on her back near the edge of a couch or bed, which is protected by rubber cloth, her limbs drawn up. It is easier for the operator, less unpleasant for the patient, insures the more thorough application of the warm water, and with anything like reasonable care neither the bedclothing nor that of the patient will be wet.

uncertain; for, as far as I have been able to learn, the date of the first operation has never been published. Indorsed by such eminent masters, it certainly is not only justifiable, but advisable in cases of cystitis that have baffled all other reasonable modes of treatment. This is itself an eminently rational treatment, for it gives the bladder just what naturally, as well as by experience, is suggested in disorder or injury of numerous other organs or parts of the human body—rest. In many instances this is one of the most valuable of therapeutic measures; sometimes indeed the only one required.

"So far as I know the method of operating pursued in the case which has been detailed is my own, and I would suggest it for the consideration of those who may contemplate performing a similar operation, or indeed making vaginal lithotomy, as preferable to incision with a knife, on these grounds: less hemorrhage and more certainty in direction and extent of incision. As to the direction of the incision, of course it should be in the median line, and that is really a perpendicular let-fall from the apex of the vesical triangle to its base. As to extent, an inch is quite long enough, at most; and this will reach to the base of the triangle, a line drawn from the orifice of one ureter to that of the other, for the vesical portion of the vagina does not measure ordinarily more than an inch and a quarter, and in a case of chronic cystitis the probability is that it will be found less than this.\*

"The tube buttoning into the bladder is a suggestion made to me by Dr. Emmet in correspondence—the shape and size are according to my own plan—and indeed it is a most useful and almost indispensable instrument; for incisions in a contracted, thickened, and irritable bladder are very liable to close. There is more difficulty in keeping them open than any one would imagine who has never tried the experiment."

Dr. A. T. Keyt, of Cincinnati, appears in a letter to the editor of The Clinic, in which he reviews the practice of Dr. Parvin. He says:

"In my opinion, it is not justified, for the reason, first, the operations required and conditions incurred are formidable evils; and secondly, the disease can be treated just as well by other means. No one will deny that a vesico-vaginal fistula is a severe affliction—one involving the deepest mortification and mental distress, besides the suffering from the local irritation inevitably set up in contiguous parts. A woman thus afflicted cheerfully submits to the torture of an operation, or if need be of repeated operations, in the hope of being relieved from her loathsome and distressing malady. The artificially produced fistula is no less an evil than that arising from disease or injury. In order to more fully appreciate

<sup>\* &</sup>quot;Dr. Savage, On the Female Pelvic Organs, remarks: 'The urethra is about an inch and a quarter long. Allowing two inches and a half as the length of the urethro-vesico-vaginal septum, the anterior half of it is urethral.' Of course then the vesico-vaginal portion would have the same measurement.

<sup>&</sup>quot;Debrouaix, Traite des Fistules Uro-Genitales de la Femme, Bruxelles, 1870, page 221, states that the length of the anterior wall of the vagina in women who have borne children varies between seven and nine centimeters; that is, from about 2.75 to 3.54 of one inch.

the evil of this procedure, I will now consider the first operation, the essentials of which are thus described by Dr. Parvin: 'A curved trocar was passed along the urethra and caused to penetrate the vesico-vaginal wall just beyond the vesical meatus; and through the opening then made the blunt blade of a pair of scissors was passed into the bladder, and an incision nearly an inch in length, directly in the median line, was made. When the hemorrhage, which was not great, ceased, a tube, somewhat larger in diameter than a female catheter, half an inch in length, and provided at either extremity with a perforated "button," was inserted into the opening.' This is a very painful operation—so painful, I dare say, that without chloroform, the most aggressive modern genecologist would not have the heart to recommend it; and though chloroform will diminish the conciousness of pain, it adds the element of danger of immediate death from this agent, which is by no means too trivial to be taken into the account. It is a bloody operation. The parts are vascular, and, though pains may be taken to cut in the median line, more or less hemorrhage is unavoidable-a considerable hemorrhage is probable, and a dangerous hemorrhage is not improbable. This risk is the more apparent in that effectual means can not be here used to control the bleeding; adequate pressure is impractical, styptics are washed away, bleeding vessels can not be secured. It involves the risk of shock. This grave condition of sudden depression of the vital powers is very liable to ensue upon operations on the bladder, and this one can claim no exemption.

"Then follows the danger of urinary infiltration. The loose tissue between the vesical and vaginal walls, communicating, as it does, with the general cellular tissue of the pelvis, is very favorable to the diffusion of urine, and the space between the tube and the parietes of the bladder-wound gives freedom of passage into this tissue; and then an obstruction of the vaginal wound, which is more likely than not to take place, completes the conditions by which infiltration of urine becomes a probable event. Connected with this condition, and also additionally independent of it, is the liability to pelvic cellulitis, with its due and complicated train of local and constitutional evils; add to the list the danger of peritonitis, and it becomes unnecessary to specify further. Enough has been said to show that vesico-vaginal fistula is made at the expense of great suffering and danger. But this is not all; if the patient survive the distress of stillicidium, urinæ, before referred to, must next be borne, and for a length of time dependent upon circumstances. The experimenter will probably require a long time to determine whether the method will cure or should be abandoned. Nevertheless, the time will come when he will deem it expedient to remove the tube and close the fistula. A tube in the bladder with a button on the end of it can not be removed without a considerable enlargement of the aperture by incision, and a vesico-vaginal fistula can not be closed without a considerable and very tedious operation. In all this the woman is again tortured, and her life is again placed in jeopardy. Happy is she if after one operation she can rejoice in a fistula cured, and her fate be not to require a repetition of those painful experiences.

"All this is to be done and suffered that the bladder may have 'rest,' and be syringed out with warm water through the tube, when the natural passage-way, only an inch and a quarter in length, with its vesical meatus just in front of this

artificial opening, affords every facility for carrying out these objects of treatment. And no reason can be found that cystitis should not be treated as well through the urethra as through a fistulous passage. But are there any results of this strange plan upon which an argument can be ventured in its favor? Of the results in the cases managed by Dr. Emmet and Sir James Y. Simpson I know nothing. The result in Dr. Parvin's case is thus reported by himself two weeks after the operation: 'Thus far the condition of the patient has been decidedly improved, and there is every reason to hope that in the course of six or eight months, by the rest given the bladder and the faithful use of warm-water injections, the cystitis will be cured, and then the fistula can be readily closed.' This is inconclusive; two weeks time is too short to determine anything. Hope is good, but 'hope deferred maketh the heart sick;' and there is reason to fear, that this patient will become disgusted and disheartened, and demand to be relieved of her fistula long before the expiration of six months. However, we will await a further report; and in the mean time, for the sake of argument, I will grant that after a sufficient time a cure shall be effected in this case, and also that cures were effected in the cases bearing the distinguished names above mentioned, and yet the admitted results would not prove the superiority of the treatment; for doubtless the same assiduous personal attention of the physicians treating the cases through the urethra would accomplish equally favorable results. It is scarcely necessary to say that the facts supporting the ordinary plan are numerous enough, and yet I know that the treatment of chronic cystitis is often unsatisfactory, because to be successful it requires patience and forbearance on the part of the patient, and most assiduous, persevering care on the part of the attendant. Unhappily these qualities in one or both are frequently absent, and the consequence is a failure. But one has no right to inflict a personal injury on his patient that she may be made tractable, and he to feel the responsibility and interest in the case that will compel his care. This practice then can claim no results not attainable by ordinary methods.

"A word as to the claims of authority: Dr. Parvin finds his justification chiefly in that the operation had been sanctioned by two such illustrious names. I admire and respect the great lights; but I would not gaze on them till my eyes are dimmed for the contemplation of all other objects. It is a painful truth that our great masters are fallible, and really deplorable is it that so many are ready to blindly copy their errors. A question like this I choose to investigate on its merits, and so doing I arrive at the certain conviction that Dr. Parvin and his illustrious predecessors have egregiously erred; dangerous, unnecessary, and as such is deserving the unqualified censure of a profession whose noble mission is the practice of beneficence and humanity."

An anonymous correspondent, who manifests more passion than knowledge, in the same journal speaks of the operation as "a dreadful enormity," and calls on "Dr. Emmet to disavow his share in this horrible transaction." Dr. Emmet answers the call as follows:

NEW YORK, November 27, 1871.

TO THE EDITORS AMERICAN PRACTITIONER:

My attention has been drawn to a communication from Dr. Keyt, and an anonymous one, both published in The Clinic of November 18th, criticising the operation for chronic cystitis lately performed by Dr. Parvin. The writer of one of the articles states that "we shall expect Dr. Emmet to disavow his share in this horrible transaction." In answer, I have simply to acknowledge that the operation was done by my advice, and that the use of the trocar by Dr. Parvin is, I think, an advance in the mode of operating. During the past nine years, while I have been at the head of the Woman's Hospital, it has been of rare occurrence at any time that we have not had one or more cases of chronic cystitis under treatment by the method in question. It is evident that the objections made to the operation, although plausibly taken, are merely theoretical. It has never been practiced or proposed to resort to this procedure in cases of simple irritation of the bladder, or under any circumstances, until other means of relief have failed.

A certain number of cases of long standing, however, exist where the walls of the bladder have become thickened, and this hypertrophy is kept up by the increasing effort to force out every drop of urine as it passes into the bladder. This condition, I believe, is incurable by any other known means than that gained by the rest afforded after creating an artificial opening. If these gentlemen have ever had such a case under their care, and have been successful in curing their patient, no greater boon could be granted to suffering humanity than to give their method the greatest publicity. To inject the bladder in this condition, even with the use of a large double catheter, admitting of the free exit of the fluid, is an utter impossibility, except under the full effects of an anæsthetic. In my experience, instead of lessening the inflammation in such cases, it has been aggravated by the partial dilatation on injecting any quantity of fluid into the bladder which has long been contracted. The bladder has become denuded, to a great extent, of its mucous membrane, so that with the greatest care the jet of water will often cause hemorrhage, and without some force is given to the stream it will be of no benefit in dislodging the muco-phosphatic accumulation. So utterly wretched becomes even existence with this condition that I have not yet seen a case who would not cheerfully give her consent to brave all the horrors and consequences of the operation, even if true as depicted by these gentlemen, to obtain relief afterward. It must be borne in mind that this condition of the bladder for which the operation is practiced is of a most serious character, and that ultimately the inflammation will extend along the ureters and involve the kidneys. I have seen such a case, too late for relief, where I dared not operate in consequence of pelvic cellulitis, which had been set up from the inflammation of the bladder, and death resulted from uramic poisoning. We are therefore justified in assuming a certain amount of risk for obtaining relief by this operation, and of practicing it until a better method is presented to the profession.

Now, the facts of the case are these: entire relief and a permanent cure can be obtained by the operation provided the fistula remains sufficiently open for the free escape of urine, and rest be given by this means to the bladder, for six months or longer, until all thickening of its walls has disappeared. I have cases under observation who were treated by this method years ago, who have remained perfectly well, and who would have been in their graves long since but for this operation. The operation itself, with the proper means of exploration, is as simple as any in minor surgery, and attended with as little risk. The great difficulty in the after-treatment is to keep the fistula from closing too soon. As to the loss of blood, it is so trifling, in my experience, as to be of no consequence, provided the incision is made in the median line, sufficiently remote from the neck of the bladder and the cervix uteri. The fear of urinary infiltration is entirely theoretical, from the fact that it can only take place with an accumulation in the bladder, and the object of the operation is to avoid this. The only serious objection to the operation is the inconvenience to the female from the escape of urine. After the edges of the fistula have healed there will remain no longer any irritation of the bladder or excoriation from the urine, provided the vagina is syringed out once or twice a day, and the surface of the vaginal outlet protected by some simple ointment. By a proper attention to the washing and changing of the napkins all smell can be avoided, and the female may attend to the duties of life without her condition being known, Notwithstanding all the inconvenience to which the patient may be subjected, her condition has been improved beyond comparison with her previous one, and it is borne most cheerfully.

The difficulties in closing ultimately the fistula are scarcely worthy of comment at this period, when every step of the operation has become so well known and simplified as to be within the scope of many surgeons all over the country. The opening, under any circumstances, will scarcely be found larger than a No. 12 bougie, with its edges lying in contact, and free from all tension. In the majority of cases, I believe, if the edges were freshened with a pair of scissors, and the patient kept in bed, with a catheter in the bladder, for a week, that

union would take place even without the introduction of sutures.

I have not entered into greater details from the fact that I have been, for some time, under promise to Dr. Parvin to prepare an article on this subject for the American Practitioner, and I shall now, under the circumstances, endeavor to fulfill my promise as soon as possible.

Yours respectfully, TH

THOS. ADDIS EMMET.

## The Clinic of December 9th contains the following from Dr. Parvin:

"To my critic I will first reply, and then present some arguments in favor of the operation which has found so swift a witness against it in Dr. Keyt. So swift a witness! The very day The Clinic was issued the criticism was written. The Doctor reads a report of what to him was a new operation—an entire novelty in surgical therapeutics—and without waiting, as I shall presently prove from his own words, to comprehend the principle upon which it was based, without reflecting upon the analogies which strengthen it, and without inquiring as to the successes which fully establish its claim to the indorsement of the profession, he at once assumes the role of an extemporaneous critic, arrays argument

more formidable in number than in force, and deals out condemnation and censure with a lavish hand. Possibility of error on his part, from ignorance or other cause, or of hasty judgment, he does not admit. His attitude is far from the humility which generally characterizes men of such attainments with such facility of use.

"One thing must be obvious to unprejudiced readers of his criticism: objections to the operation are mainly theoretical—this, that, or the other might happen. A single pertinent fact outweighs all such reasoning. Another thing must be equally obvious: he often seizes upon the most superficial reasons, just as an unarmed man in an open field, suddenly needing means of offense, might pick up that which lay to his hand, even if nothing better offered than clods of earth or tufts of grass.

"The first two of these objections are: the operation is 'very painful,' and if an anæsthetic is given—of course he selects chloroform—it may kill. These objections are without special pertinence; and I will merely say, as the operation is a brief one, the risk from anæsthesia is almost at its minimum.

"But 'a considerable hemorrhage is probable, and a dangerous hemorrhage is not improbable.' More than fifty years have elapsed since vaginal lithotomy was first proposed, and numerous cases of this operation have occurred in that time. A similar vesico-vaginal section has not unfrequently been resorted to for the removal of foreign bodies from the bladder. Now, surely Dr. Keyt ought to find at least a few cases in these two classes in which 'dangerous hemorrhage' happened. So too he ought to condemn Sims, Erichsen, Baker, Brown, Savage, and others for their indorsement of vaginal lithotomy. Even did this 'dangerous hemorrhage, which is not improbable,' occur from making the fistula, possibly position, cold, and pressure might arrest it, or, these failing, a few twisted sutures certainly would.

"'Shock' is the critic's next horror. What utter poverty of thought, if not of knowledge, to adduce this when vaginal lithotomies and operations for genitourinary fistulæ in almost countless number testify to its complete improbability.

"'Urinary infiltration' next stares us in the face, and it happens in this wise: the vaginal wound closes, the vesical remains patent, and the urine runs round the tube; can't get out into the vagina, won't go back into the bladder, but hastens into the connective tissue between, and so has a free course into 'the general cellular tissue of the pelvis.' Urine wise and wonderful, with such an elective affinity for cellular tissue that it disdains to make its exit through the urethra; but fashions for itself a new pathway, ever so many pathways, even though it has to go up-hill at the start—for the patient after these operations lies upon her back—and up-hill most of the time in its marvelous pelvic meanderings! Dr. Keyt's supposition that the vaginal wound may close over the 'button,' which is one fourth larger than the tube, is extremely probable—almost as probable as that the urine would enter the connective tissue rather than escape by the urethra in case such closure occurred.

"Pelvi-peritonitis and pelvi-cellulitis are the next dangers that the prolific imagination of Dr. Keyt produces. Are these forms of inflammation common or exceedingly rare after operations for vesico-vaginal fistulæ? In such operations there is generally much more cutting done in the vivifying of the fistulous

margin. There may be twenty, thirty, or forty punctured wounds made in the introduction of the sutures, and there may also be liberating incisions. Besides, the operations are longer. Yet if pelvic inflammation is rare after them, still more will it be rare after the operation which Dr. Keyt so strongly condemns.

"The 'button' next fastens his attention. To get it out when it is proposed to close the fistula will 'require a considerable enlargement of the aperture by incision.' My belief is that the tube, with the dreadful button, may be dispensed with after the first two or three weeks, the liability to premature closures being by that time much lessened. I have removed it in the case upon which I operated. This objection, which is simply trivial, therefore falls to the ground.

"The poor patient 'is tortured and her life put in jeopardy' by the operation for closing the fistula; and of course the Doctor, not straining a point, not anxious to make out a case, but in his ample charity and his large knowledge, suggests that the first operation will fail, and there will be 'a repetition of these painful experiences.' But suppose the fistula should close without any operation? Mr. Lawson Tait, in recounting the cases upon which Professor Simpson operated, remarks that the great difficulty is not in closing, but in keeping it open. But let an operation be required, there is not 'forture' if an anæsthetic is used, and the 'jeopardy,' as statistics show, is exceedingly small, while the success of the first operation in closing an opening no larger, so situated, and with no loss of substance, is almost certain.

"'All this is done and suffered,' says the critic, 'that the bladder may have "rest," and be syringed out with warm water through the tube, when the natural passage, etc., affords every facility for carrying out these objects of treatment.' Either Dr. Keyt puts up a very small man of straw to knock down with his clods and tufts of grass, or else he is utterly ignorant of the fundamental principle upon which the operation is based. The prime object of making the fistula is, as Sir James Simpson said, to secure physiological rest to the diseased organ. What are the functions of the bladder? The bladder is a receptacle into which the urine flows, in which for a time it is retained, and from which it is expelled by contraction of the muscular coat. As long as it is a practically closed cavity containing urine, as long as its muscular contractions are to be invoked for the expulsion of that urine, it has not, in the diseased condition to which we refer, rest; but when a fistula is made which allows the urine to escape almost as soon as it enters the bladder, and thus there is no irritation of inflamed surfaces, and there is no call for muscular contraction, as there is no urine to expel, the organ has that rest which is so important for the restoration of its integrity.

"Dr. Keyt boldly asserts 'this practice can claim no results not attainable by ordinary methods;' and this assertion comes from one who says he knows nothing of the results of cases thus treated by Sir James Simpson and by Dr. Emmet. Because in his cases of cystic disease he has got on well by local medication, therefore all cases can be thus successfully treated, or rather no case can be cured by making a fistula which could not be as well cured without. Such is the position he takes. This is merely negative evidence, and is of very little value in comparison with positive testimony. If A saw B murder C, what does the negative evidence of a hundred or of ten hundred who did not witness

the deed amount to? Dr. Emmet, Sir James Simpson, Mr. Lawson Tait, Prof. T. G. Thomas, and others give positive evidence on the question of this operation. In a letter received from Dr. Thomas the following language is used: 'Cystitis often requires a vesico-vaginal fistula. It is frequently incurable by other means.'

"Let me say a word as to the fistula which Dr. Keyt magnifies into such a terrible evil, 'involving the deepest mortification and mental distress, besides the suffering from the local irritation inevitably set up in contiguous parts.' With a properly adapted urinal there need not be one tenth the trouble to the patient which the sympathetic critic supposes. The lady upon whom I operated, attractive and accomplished, and at a period of life when society has numerous charms, accepts her fistula as a blessed relief from the agonizing sufferings which she had so long endured, sufferings which skillful physicians had vainly sought by all the known means of local medication and constitutional treatment to remove, and to-day declared to me that she would rather go through life with her infirmity than have to endure again the spasms of the bladder, the burning in it, and the difficult and frequent micturition which tortured her by night and by day. Should Dr. Keyt visit Indianapolis I will be most happy to have him see this patient. Once seeing her, and hearing fully the history of her case, should he review a similar operation, I trust he will spend less time in trivial objections, be less dogmatic, and not indulge in such unqualified and causeless condemnation, as if, enthroned upon Walnut Hills, his opinion was truth, and his word was law in the science and art of medicine.

"And now, turning from the consideration of Dr. Keyt's criticism, I wish briefly to present some of the claims which this operation has upon the approval of the intelligent members of the profession.

"One of the most obvious indications in the treatment of many diseases is to secure rest to the organ or part affected. This is a curative agent whose value can scarcely be exaggerated. Mr. Hilton, in the first of his lectures on Pain and Rest, most beautifully shows the wisdom of nature's teaching in this regard, and demonstrates, from the condition of growth, which 'is the antitype of repair, prefiguring the physiological capabilities of existing structures to repair themselves,' the therapeutic value of rest. Without waiting to adduce any of the countless illustrations from medical therapeutics of the truth referred to, let me present a few from surgical practice. In anal fissure or ulcer the surgeon, by rupture or by section of the sphincter, puts the parts at rest. Tenotomy is sometimes resorted to where muscular contraction causes pressure of inflamed surfaces. In fractures rest is the first, often the only, condition upon which the cure depends. Mr. Allingham (St. Thomas's Hospital Reports, 1870) resorts to colotomy 'to relieve, and perhaps cure, an otherwise incurable case of stricture and ulceration of the rectum.'

"Accidental cures have sometimes occurred thus: patients have been cut for stone, but no stone found. Nevertheless, the symptoms which led to the belief of the existence of vesical calculus disappeared after the lithotomy. Three such cases occurred in the practice of Roux. Probably these have been cases of cystitis.

"One of the most interesting cases bearing upon the present discussion I have found is recorded by Gunther (*Bibiliotheque du Medecin Practicien*, vol 3, p. 552), where nature cured a case of cystitis by forming a urethral fistula.

"The practice of Mr. Cock, of Guy's Hospital, in certain cases of urethral stricture, was to puncture the bladder through the rectum, saying: 'Let us withdraw the urine from the urethra altogether for a few days, and the urethra will recover itself, so that we may be able to cure the stricture with ease.'

"Sir Henry Thompson, in referring to cases where supra-pubic puncture of the bladder was made, and a tube introduced, remarks: 'I have known patients who have passed all the urine through a tube above the pubes for ten or fifteen years, and who had active and comfortable lives in consequence, the natural passage being completely obstructed. One of them, who had suffered greatly before, and was now in perfect comfort, told me that he did not know whether

this mode of passing water was not preferable to the original one.'

" Now, is it not entirely rational in itself, entirely rational in the light of these analogies and illustrations, that chronic inflammation of the female bladder, which has baffled other means of treatment, may be cured by securing complete rest to the diseased organ? By means of an opening into the vagina which shall permit the ready escape of the urine with no contractile effort invited or required on its part, let it for a while be no longer a bladder, but a surface over only a small portion of which the renal secretion passes in its way out, and we have it in the most favorable condition for cure. The bladder in case of chronic inflammation has its cavity lessened, its muscular coat hypertrophied, while its mucous lining may be the seat of ulcerations. Indeed, in the cases successfully treated by Professor Simpson by making a fistula, and reported by Mr. Tait, there was what is described as chronic perforating ulcer. Give rest to the organ that this ulceration may heal, that this inflamed mucous surface, no longer irritated by being bathed in urine and by constant motion from vesical contractions which it invokes, may return to its normal condition, and that the hypertrophy of the muscular tissue may diminish.

"The results of operations justify the faith which sound reason gives for this treatment. Professor Simpson's patients were cured; and I know that Dr. Emmet has been quite successful in the cases upon which he has operated. What number he has thus treated I do not know, but it is expected that he will soon present the profession with a paper upon the subject, in which full

statistics will be given.

"As to the methods of operating, Prof. Simpson's was to introduce a grooved staff along the urethra, and slit up the posterior fourth of the urethra and about an inch of the posterior wall of the bladder. Dr. Emmet's operation is similarly performed, but does not involve the urethra at all. In my own, as previously stated, a curved trocar and canula was passed through the urethra, the vesicovaginal wall penetrated, then scissors used to complete the operation.

"There are many other points which I would like to present in this vindication—vindication not of myself (individuals are little or nothing, principles and truth everything in medicine), but of a most valuable method of treating some cases of a peculiarly obstinate and painful disorder; vindication from unjust censure, ignorant it is true, but none the less unjust; but so much space has been devoted to answering Dr. Keyt's objections that I will not further tax the kindness of the editor of The Clinic.

"Note.-The Clinic for December 2d, which I have just received, contains another of Dr. Keyt's arguments against the operation-viz., 'ulceration and sloughing of the wound. As a matter of fact, the trickling of urine would be from the first into and through the wound around the tube rather than through the tube itself. The surfaces thus separated and irritated would readily take on inflammatory and ulcerative action, running into gangrene.' It is hardly worth while to follow a critic who honestly adduces such an objection, and sustains it by such reasoning, neither of which could come from one having either practical or theoretical knowledge in the matter, and a reader having this knowledge would not expect a reply; but for Dr. Keyt's benefit-if an individual so rich in imaginative power and almost as prolific in arguments as the tania solium in eggs can be benefited-I will state that Prof. Simon's observations and experiments have proved that the urine is entirely innocuous to wounded surfaces, and hence this objection of Dr. Keyt's, sustained by some very bad reasoning, amounts to nothing. Dr. Keyt ought to have known these investigations by Simon—they are ten years old at least—as well as a good many other things relating to the question at issue, before entering the field of criticism; but really his facility for argument seems to increase with his freedom from knowledge, so that he gives the crudest theories and most absurd fancies with the gravity of demonstrated truth. There is little hope of his now or ever learning anything that does not conform to his own opinions and theories, and he will probably live and die a self-chosen priest of a decayed faith."

# THE MEDICAL PROFESSION OF CHICAGO TO THE MEDICAL PROFESSION OF THE UNITED STATES.—We insert the following with great pleasure:

"The terrible calamity which has recently fallen upon the city of Chicago, and upon various portions of the Northwest, has awakened the sympathy of the world, and both money and material have been sent to the suffering districts with an abundance and alacrity which has never before been witnessed; but no one who has considered the extent of the losses, or the amount of suffering entailed, can feel any apprehension that the work of charity is likely to be overdone, nor indeed that it will be possible to fill the measure of the actual want. There ought to be no relaxation in these general measures of relief for many months to come, nor is it probable that there will be; but there is one class whose misfortunes appeal most especially to the members of our profession. More than a hundred physicians in Chicago, and probably as many more in other portions of the Northwest, have lost all they possessed. The intelligence received by us, from trustworthy sources, is of the most painful character; and it is with reluctance that we make public the fact that up to this moment seventy-seven physicians in Chicago alone have been driven to the necessity of placing their names upon the list of those requiring pecuniary aid. God forbid that we should delay to give them help. We beg you

to reflect that the situation of these physicians, with their families, is peculiar. The laborer may find immediate employment at his usual wages; the merchant may buy and build upon his credit; the clergyman has his congregation, much less able to pay than formerly, but nevertheless responsible for his support. The physician has ordinarily none of these resources. With neither house nor furniture, horse, carriage, nor instruments, he must do what little he can, and wait the slow returns from a population reduced, like himself, almost or quite to beggary. Our calling is never a lucrative one, but in Chicago to-day it can hardly be expected to supply the necessaries of life, and perhaps not for a year to come.

"In our opinion these seventy-seven doctors, and probably as many more, will need from \$500 to \$1,000 each to carry them safely through the year, and to put them once more upon their feet. From \$50,000 to \$80,000 is our lowest estimate of what should be sent to the Chicago doctors' relief fund. With this money they may be placed upon salaries, and in return perform such public services

among the sick and poor as may be required.

"We have already received from the physicians of New York over \$5,000, of which sum \$4,000 has been sent to Chicago. The remainder is retained for the purpose of aiding the physicians of Wisconsin and Michigan, and will be forwarded to Chicago or elsewhere as soon as we receive information as to where it is especially needed. Many of the other large cities have sent in similar contributions. We have no means of knowing how much has been contributed, but we have no doubt the sum is totally inadequate to meet the exigencies of the case. It is proposed therefore to continue the organization of the committee, and not to cease efforts during the winter, unless its services should seem to be no longer required.

"To physicians living in scattered districts we take the liberty of suggesting organized action through county or other local associations. Those who prefer can send their contributions direct to Walter Hay, M. D., Secretary of the Chicago Medical Relief Committee, No. 384 Michigan Avenue, Chicago; or to the treasurer of this committee, Samuel T. Hubbard, M. D., No. 27 West Ninth Street, New York. We earnestly hope that no physician in the United States will omit to contribute something, however small the amount may be, to this charity, in any way and through any channel they may choose; but that they all give, and that speedily. If our medical brethren knew only a few of the examples of individual suffering which have come to our knowledge, but which we do not feel at liberty to publish, their contributions would not be delayed.

"Surgical instruments may be sent to the following surgical instrument-makers in this city, by whom they will be forwarded free of charge; George Tiemann & Co., Darrow & Co., Otto & Reynders, Shepard & Dudly, and Stohlmann, Pfarre & Co. Books will be received and forwarded by William Wood & Co.\*

"It may be necessary to add, in explanation of a diversion of a portion of the funds originally intended only for the physicians of Chicago, that the probability of an appeal from the physicians of the burnt districts of Michigan and of Wisconsin determined the committee to reserve a small portion for such an exigency; and further, that in consideration of the fact that the medical students

<sup>\*</sup>Contributions of all kinds will be forwarded, free of charge, by John P. Morton & Co., the publishers of the American Practitioner.

of this city have given very liberally to this fund, it was determined to suggest to those having in charge the distribution of these charities that they will not overlook the claims of medical students who may in the same manner have been left destitute.

Frank H. Hamilton, M. D., Chairman. Alfred E. Purdy, M. D., Secretary. Samuel T. Hubbard, M. D., Treasurer.

RUSH MEDICAL COLLEGE, CHICAGO.—The following appeal, though dated November I, 1871, came too late for insertion in our December number. We give it place here with much pleasure, and with the hope that every friend of the fine institution which was recently destroyed by fire will respond liberally to the call for aid to assist in its rebuilding:

"This college is among the oldest institutions of learning in the Northwest, having been in operation since 1843, at which time the region now tributary to Chicago was but sparsely populated and had little wealth. During this time it has supplied a pressing need of this new country. It has educated a large number of young men, who are scattered through our whole country, worthily filling places of great usefulness and responsibility; and for this, both themselves and the public are indebted, in a great measure, to the school in which they received their instruction. A large proportion of its students have been possessed of little save youth, hope, intelligence, and determination. Many of these, having been generously aided by the college, have taken rank among the most substantial members of the profession. The faculty at all times, since its organization, has been moved by an earnest desire to promote the best interests of the profession and the college. For this its members have labored faithfully and earnestly; they have met the pecuniary burden of the school from its first foundation, and four years since they erected from their own resources, at an expense of \$70,000, the most ample and best appointed college-building on this continent, and filled it with every necessary appliance for successful teaching, and the influence and usefulness of the school has steadily increased from year to year. But in a day the collegebuilding, with all its contents, was swept away, along with a large part of the city, in which it stood a peer among many other noble institutions of learning. The pecuniary loss of the faculty in the destruction of the college is light when weighed against others they have sustained. A number have lost nearly everything, and all have suffered much. The college must be rebuilt. Its past history, its future promise for good, demand no less. Under the circumstances, it is unreasonable to expect the faculty to do this unaided. The college is now in a condition to justify an appeal to its alumni and to society for some return for the favors it has conferred upon both. There is perhaps no field of benevolence that offers a richer return than to provide adequate and easy opportunities for the instruction of those who desire to become learned in the best means for assuaging pain and healing the sick.

"All donations may be remitted to Chas. T. Parkes, M. D., 462 Elston Avenue, Chicago, treasurer for the fund."

### The trustees of the institution add the following:

"For every donation of five hundred dollars the trustees will establish a perpetual free scholarship, which shall bear the name of the donor, and which shall be conspicuously emblazoned on the wall of the lecture-room. A certificate of this scholarship, engrossed on parchment, will be issued to the donor; which certificate shall secure to the bearer free tuition, and when found qualified free graduation. This certificate shall be perpetual in its operation; and thus the donor will have endowed for one student each year a free medical college."

CORRECTION.—In a notice of the fire in Chicago which appeared in the November number of the American Practitioner it was stated that both the medical colleges of that city had been destroyed. This was a mistake. The Rush Medical College was consumed, but the Chicago Medical College was unharmed. We publish elsewhere an appeal from the former.

REBUKE.—Dr. Logan, President of the State Medical Society of California, in an elaborate address recently delivered before that body, administered the following pointed rebuke to the fault-finders with the American Medical Association. He says:

"There have appeared disparaging statements, strictures on the proceedings of our National Association, in medical and other journals, within the past six months, which, to say the least of them, are as disingenuous as they are uncalled for. Some of these censorious writers pretend to be, equally with us, anxious for the elevation of a noble profession, the promotion of science, the good of humanity, but they take a strange method of showing such proclivities. instead of trying with the spirit of the Commune to pull down, they would convince us of a more practically effectual mode of building up the sacred temple of our divine science, according to the present designs and specifications, all of us are ready to accept the new proposal, and would rather thank than censure those who offer it. But believing, as I do, that they can not improve upon the work commenced by a Davis, approved by a Chapman, a Knight, a Stevens, a Moultrie, and a Buchanan (the founder and the first president and vicepresidents), and continuously prosecuted up to the present hour by men equally as illustrious from all sections of our favored land; men whose reputation is bounded by no geographical limits-citizens of the universal republic of science; I say, believing thus, I can not refrain, as an officer of our National Association, bound by the duties of hospitality to our departed guests, from attempting to wipe out the aspersions which have been so ungenerously cast upon it."

CORRECTION.—A friend has called the writer's attention to the fact that in the last number of the American Practitioner he attributed to the late Dr. T. Hawkes Tanner a work by the living Dr. John Tanner, in a notice of the work in question—a mistake that he regrets having made, but which he is glad to have corrected.

T. P.

THE CENTRAL KENTUCKY MEDICAL ASSOCIATION.—This Association held its third regular meeting at Stanford, on Wednesday, the 18th of October, in the Odd Fellows' Hall, at ten A. M. After a few words of welcome from the president, Dr. Spilman, the debate was opened by Dr. A. R. McKee with an excellent paper on Fractures of the Long Bones, their Nature, Diagnosis, and Treatment, which was followed by an animated discussion as to the best method of treating this class of fractures.

Dr. J. D. Jackson read an interesting paper on *Loose Cartilages in the Knee-joint*, with a case and removal, followed by recovery, exhibiting the body extracted.

Dr. H. Brown read a report of a case of *Entero-vaginal Fistula*.

Dr. R. W. Dunlap reported verbally a case of *Uterine Hemorrhage*, recurring every seven days. The periodicity—the only point of interest in this case—gave rise to considerable discussion.

Dr. Hunn reported verbally a case of paralysis of the bladder, sphincter ani, and right leg in a boy, the result of an injury received in falling from a wagon, the boy falling and striking himself on the wheel over the last lumbar vertebræ.

Dr. W. B. Harlan exhibited a case—the patient present and exhibited in person—of *Progressive Muscular Atrophy*. The patient, a man thirty years old, married and the father of several children, presented the prominent characteristic phenomena of this disease—a flattened and wasted appearance of the muscles, "main en griffe," loss of use of both arms,

so that he has to be fed, though the atrophied muscles still respond to the galvanic current, fibrillary contractions of the muscles, etc. It began four years ago with a sensation of numbness in the left thumb, and has progressed uninterruptedly, the fibrillary contractions being now beautifully shown over some of the trunkal muscles, and especially those of the thigh. A point of interest in the case is that there has been no diminution in the sexual vigor.

Dr. J. D. Jackson exhibited the uterus of a girl fourteen years old, showing five small ovarian cysts in various stages of growth, the largest not being larger than a bullet.

The membership was increased considerably at this meeting, and the attendance was unusually large, Garrard County being well represented. A handsome entertainment was given by the "Lincoln County Medical Society," which added greatly to the enjoyment of the day, good cheer and good feeling being abundant. The next meeting will be held at Lancaster, on the third Wednesday in January next, at four o'clock P. M. Subject Syphilis, Dr. Huffman, of Lancaster, to open the debate.

GEO. T. ERWIN, M. D., Secretary.